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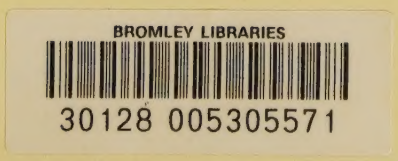
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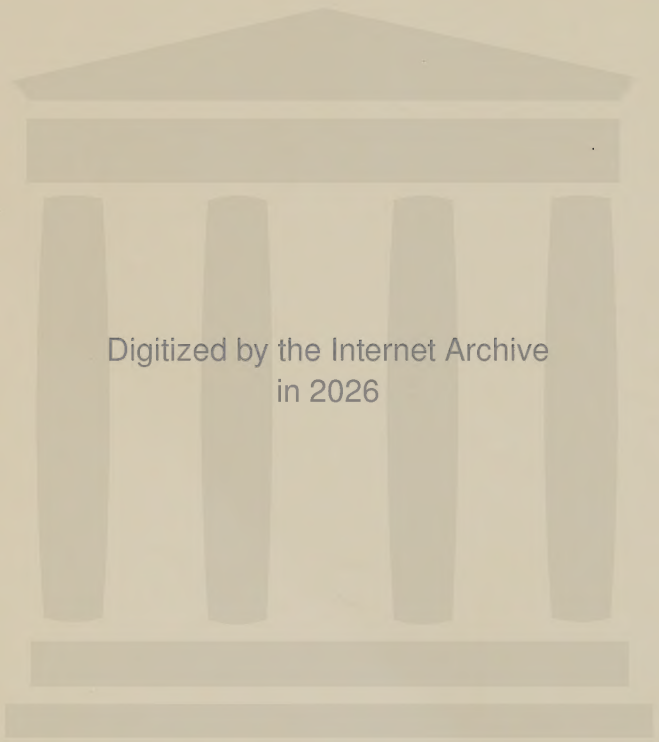

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THE

HISTORY,

GAZETTEER, AND DIRECTORY

OF THE

COUNTY OF DERBY:

DRAWN UP FROM ACTUAL OBSERVATION,

AND

FROM THE BEST AUTHORITIES;

CONTAINING A VARIETY OF

GEOLOGICAL, MINERALOGICAL, COMMERCIAL, AND STATISTICAL INFORMATION.

ILLUSTRATED BY A MAP OF THE COUNTY, AND NUMEROUS COPPER-PLATE AND WOOD ENGRAVINGS BY THE FIRST ARTISTS.

The Materials and Directory collected by the Publisher,

STEPHEN GLOVER.

EDITED BY

THOMAS NOBLE, Esq.

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TO THE MOST NOBLE

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Duke of Devonshire,

MARQUESS OF HARTINGTON,

EARL OF DEVONSHIRE, BARON CLIFFORD, AND BARON CAVENDISH OF HARDWICK,

K. G. K. A.

LORD LIEUTENANT AND HIGH STEWARD OF THE COUNTY OF DERBY, HIGH STEWARD OF THE CORPORATION OF DERBY, D. C. L. &c. &c.

My Lord Duke,

A History of Derbyshire has necessarily a claim upon the patronage of your Grace; because that extensive influence, with which philanthropy, munificence, patriotism and love of the liberal arts, endow rank and opulence, is, my Lord Duke, your own; and this County is happily the seat of its power. Its beneficent spirit is felt in Ireland; and wherever your Grace possesses domains, there, as from a centre, it expands—does good within its immediate sphere, and spreads wide around it the ascendant im-

pulse of example. A History of Derbyshire will be, for the most part, a record of such examples: it cannot but narrate the patriotism of your Grace's ancestors, to whose public spirit we owe the preservation of the British Constitution; and it must endeavour to speak, although in inadequate terms, of that munificence by which your Grace preserves and increases to your tenantry, and to every place politically or personally connected with you, my Lord Duke, the blessings that emanate from the British Constitution. When we look around us through the County which this Volume describes, we see the benignant effects of liberality in its greatest Landowner; and when a general agricultural calamity of the nation has, at times, checked any of those effects, we have had here the gratification of observing, that over the Derbyshire domains of your Grace, those calamities passed with mitigated, if not with forceless, injury. The personal friendship of the Sovereign, and the anxiety of your Grace to introduce the energy of liberality into the councils of the State, are the necessary results of that beneficence of heart, which induces you, my Lord Duke, to regard the poor with charity; to extend your care to the progress of education and to the increase of knowledge; to afford your patronage on every occasion to the cultivation of the Arts and Sciences; to enrich your splendid mansions with paintings and statuary;—in a word, at once to dispense comforts to the industrious labourer, and to stimulate and invigorate the intellectual energies of the aspiring.

With these impressions, my Lord Duke, this History and Gazetteer of Derbyshire, in which it has been attempted to comprise general information with practical knowledge, and to form a work equally suited to the Gentleman, the Student, and the Man of Business, is most respectfully DEDICATED to your GRACE by

Your GRACE'S

most obedient,

and most devoted humble Servant,

STEPHEN GLOVER.

Derby, February 28, 1829.

EXPLANATION

- Boundary of County
- Boundaries of Hundreds
- Boundary of Division of County
- Boundary of Borough
- Borough Towns — the Stars shew the No of Members sent to Parl[t] — DERBY
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- Heaths Commons & Open Roads
- Woods & Parks
- Railways & Canals
- Hills
- Rivers

Scale of Statute Miles.

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A Map of the County, with fourteen views round the border.

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HISTORY AND GAZETTEER

OF THE

COUNTY OF DERBY.

CHAPTER I.

Preliminary observations. Situation, extent and boundaries of Derbyshire. Surface and natural appearance. Ridges of mountains; valleys; caverns; springs; rivers, brooks and standing waters. Particular descriptions of the most remarkable natural features of the county. Notices of interesting scenery. Climate: winds; rain: peculiar diseases; health; longevity.

Preliminary Observations.

DERBYSHIRE is an inland county of England; and, whether we consider its agricultural and mineral productions, or its rising importance in manufactures and commerce, we shall find it entitled to be ranked high among the wealthy and industrious districts of our island. Perhaps its central position and its numerous natural advantages ought to have claimed for it, long since, a pre-eminence in the home-trade of the kingdom, but it must be recollected that the facilities of internal navigation are of modern invention, and that, in their infancy, they could not be expected to encounter the difficulties presented by a mountainous region. Sheffield and Nottingham, at the very borders of this county, and Birmingham, at a short distance from its western confines, were more open to those improved means of communication. But while the manufactures of these neighbouring towns found their way to the seaports, and became branches of our foreign commerce, the natural energies of Derbyshire were not inactive. There were found in this district those inventive faculties which create the highest manufacturing powers, and then go on to perfect the powers they create. The fabrics of silk and cotton are indebted to Derbyshire for the most simple, yet most prolific combinations of machinery; and, we may add, that in the prudence and humanity which nourish manufactures into real strength, and render them blessings to both the capitalist and the operative, Derbyshire is not exceeded by any other part of the British Empire.

The rising and increasing trade and manufactures of this county do not however constitute its most prominent objects of interest. Nature here incites the topographer to scientific investigations, and calls upon him for picturesque descriptions. She, here, unfolds much of her own antiquities, in comparison with which the crumbling fragments left by the earlier generations of mankind as intimations of their existence, their pride and their superstitions, are recent and trivial. In those subjects of awful admiration,

CHAP. 1. Preliminary Observations.

which elevate at times the apparently humble science of Geology to poetic sublimity, there is scarcely a district of the globe more abundant. The Peak of Derbyshire with its surrounding region, distinguished by limestone and basaltic* strata, enriched with mineral veins and characterised by determinate formations, affords the scientific student a series of instructive facts, while it astonishes him with the mighty order and regularity of stratification which the disorderly and irregular disruptions around him have brought to view. The simple yet bold sketch of the origin of the earth which Whitehurst has delineated, and which subsequent geologists have endeavoured to fill up and perfect rather than to remodel, had its conception in his study of the stratification of Derbyshire.—With respect to the picturesque or scenic interest of the northern portion of the county, we may, with Mr. Rhodes,† justly extol "the graceful and long-continued outline," and "the breadth of light and shadow" presented by the mountainous ridges, while in the dales and valleys, "especially those through which the Derwent, the Dove, and the Wye meander, the eye is enchanted with brilliant streams, well cultivated meadows, luxuriant foliage, steep heathy hills and craggy rocks."

In the rank and influence of its landed proprietors and aristocracy, Derbyshire equals the proudest county in the realm. The histories of their families connect themselves frequently with the wars, the feuds, the public or patriotic counsels, and all the transactions, whether foreign or domestic, of the Kingdom. This portion of the labours of the topographer embraces much of the antiquities of the county. The actions of illustrious individuals are sometimes alluded to in their armorial bearings, sometimes intimated by their monuments, and are sometimes to be sought for in ancient records: but our oldest histories are unconnected chronicles of monasteries, and it is seldom that, in these documents, the affairs of either the barons or the citizens form more than a doubtful line or two of detail. The spirit of research has indeed been well directed during the last sixty or seventy years. It has done much towards the elucidation of the least luminous of former ages, and the studies of the antiquary are daily extending and correcting the pages of the historian.

The population of every portion of the civilized world is necessarily divided into classes diversified by condition, situation, pursuits and occupation, but with interests more or less blended with the interests of each other. In Derbyshire this diversity may be considered more than usually great in proportion to the number of inhabitants and extent of territory. Labour is here as varied as the aspect of the county. The lead, the iron, the coal and other mines, together with the marble and stone quarries, employ a part of the people in pursuits which have, again, their subdivisions: some of these are even distinguished from the rest by peculiar customs and long-established laws, and each of them imparts some variety of character to its neighbourhood. The agriculture, too, of the south of the county differs materially from that of the sterile mountains and abrupt though fruitful valleys of the north. The tenure of the lands, the occupation of farms, and

* The limestone of Derbyshire is divided into four beds, by intervening beds of basaltic amygdaloid. *Bakewell's Geology.*

† Peak Scenery, Sect. 1.

Preliminary Observations.

the regulations of servitude are various in different places. The inhabitants of towns and villages have also their diversities: certain trades prevail more in one district or town than in another; while manufactures are to be found in all their gradations, from the stocking loom to the foundry and the silk or cotton mill. Here, then, we have a wide and varied assortment of the characteristics of human industry and of the combinations of human interests, the contemplation of which cannot but be pregnant with utility. It is in this survey, that we claim for our labours the attention of the statist, the politician, and the man of business. On every subject connected with the human condition in the present state of society, and in the progress of that condition from barbarism and vassalage to civilization, the County of Derby will, in its past and present history, afford matter of important information and serious reflection.

Situation.

Derbyshire lies nearly in the centre of South-Britain, or of that portion of the United Kingdom called England and Wales. A point may be taken within it, near the intersection of the 53° north parallel with the western meridian of 1° 40′, which will be halfway between Berwick-upon-Tweed and the Isle of Wight, and equally distant from Foulness on the coast of Norfolk and the coast of Caernarvon. Like most inland counties, its boundaries are rather arbitrary than natural; yet, on the west, it is separated from Staffordshire by the river Dove and part of the Trent. On the north-west it is divided from Cheshire by the Goyte and the Etherow. On the northern border, which separates it from the West Riding of Yorkshire, some portion of the eastern head and branches of the Derwent, the Sheaf, and the Rother may be traced. Between Derbyshire and Nottinghamshire, on the east, we find the source and part of the Meden, with the whole course of the Erewash. This county extends southward, beyond the Trent, about ten miles, where it is irregularly bordered by Leicestershire, without any trace of a natural demarcation, except a portion of the course of the Mease.

Extent and Boundaries.

The most northern point of Derbyshire is in north latitude 53° 27′ near the springs of the Etherow and the Trough, which in many maps is named the Wrongsley. The most southern extremity lies in north latitude 52° 38′, at a small common bordering on the Measham Road, known by the name of No-man's-land: a spot, the possession of which has been disputed by the four neighbouring counties of Leicester, Stafford, Warwick and Derby. The farthest projection to the east is at west longitude from Greenwich 1° 13′. It is at a place called by some writers, the confluence of the Brooks,* near Worksop. Westward, the farthest projection is in west longitude 2° 31½′ at the junction of the Goyte and the Etherow. The direct length of the county between the above-mentioned points may be estimated at about 56 miles, and its width is rather more than 33 miles.

Form.

The form of the county is extremely irregular; and it is remarkable, that, on its borders, there are no fewer than eight places, where three counties meet at one point. This is occasioned in two instances by a considerable detached part of the county being bounded on three of its sides by Leicestershire, and on the fourth by Warwickshire. The other triple-

* See Farey.

CHAP. I. Form.

junctions with the neighbouring counties may be easily discovered by a reference to the map.

Surface.

The surface of Derbyshire is more unequal and irregular than any other portion of England of similar extent. The superficial measurement has been estimated at 972 square miles or 622,080 statute acres. About two thirds of the whole county consists of pasture and arable land; the remainder of mountainous regions, moors and commons.

The elevations of land at the north-western extremity of the county are considerable, and amongst them are those mountainous tracts which give the district called the High Peak, its celebrated Alpine character. The highest of the eminences in that district are Axe-edge, Kinder-scout, and Blakelow-stones. The Great-Axe-edge, which is the highest point of a line of lofty hills, extending across the boundaries of the county into Staffordshire, rises near Buxton: its height above the sea has been calculated at about 1875 feet.* Kinder-scout rises in the north-western angle of the Peak: its height has not been accurately ascertained. Pilkington says that this mountain "is generally supposed to have a greater elevation than any other eminence in the county;" but, in the opinion of Farey, Blakelow-stones, situated still farther north, and in which the *west-end* branch of the Derwent has its source, is the highest, and Axe-edge the lowest of these three distinguished elevations.

Ridges.

The mountainous ridges which intersect the northern part of the county, and which descend more or less and are lost in the southern plains, where they form gentle brows and pleasingly diversify the more level aspect of the country, merit particular attention. From them, with their deep and romantic valleys and caverns, Derbyshire derives much of that peculiar interest which causes it to be spoken of and frequented by the curious and intelligent of all nations. Farey enumerates forty-one "ridges or ranges of high land, in and near to Derbyshire;" and when it is considered that these ridges are the waterheads of all the rivers and brooks that flow, either within the county or its neighbourhood, that intelligent author seems to have reason for his expectation, that that part of his labour may afford even a stranger a clear idea of the general surface and features of the county. Our limits oblige us to confine our observations to a few of the principal ridges within Derbyshire: from these others branch out in lines of declining elevation.

The forms of most islands appear to be naturally determined by the direction, extent and branches of their mountainous ridges, the principal of which may always be traced either through the central districts or with abrupt dislocations along one or other of the longest sides. Of the latter description is the great Alpine Ridge of Britain, which rises in a stupendous line upon the western maritime counties of the island, and is particularly apparent in Cornwall, Devonshire, Wales, Cumberland and Scotland.

Great Alpine Ridge.

This great ridge or chain is interrupted by the valley of the Severn and the Bristol Channel: it is again more extensively broken by the waters of the Dee, the Mersey, the Ribble, together with the other streams and low lands

* This is the statement of Mr. Farey: the height according to Whitehurst is 2100 feet above the town of Derby: both these calculations differ from the Trigonometrical Survey mentioned in page 10.

between the Menai and the Lune. From the southernmost of the divisions in this chain, a branch of mountains, not continuous nor of equal magnitudes, may be observed stretching forth in a curvilinear direction towards the north-east. This branch includes the Mendip hills of Somersetshire, the Malvern hills, the rocks of granite, which, in all their primitive varieties, spread still more eastwardly among the forest-hills of Leicestershire, and take, through the counties of Warwick and Stafford, a northern direction, until they are again seen, elevated with sublime but sterile grandeur, in the above-mentioned mountains of the Peak. From the northern Ridge of the Great Alpine chain, extends another ridge, which, branching off from among the lofty and romantic regions that encompass the Cumberland lakes, constitutes the principal line of the Yorkshire range. This line of mountains includes the Great Whin-sile and Inglebrough of Yorkshire, together with the Blakelow-stones, the Kinder-scout, and the Axe-edge of the Peak.

CHAP. 1.

Great Alpine Ridge.

With this view of the manner in which the central elevations of the island are united with the southern and northern portions of our Maritime Alps, we may proceed to describe the minor ridges, which diverge in several directions from the High-Peak, and are speedily lost under the plains, and in the fruitful declivities of a richer and more recent formation, on the eastern and northern boundaries of the county.

Minor Ridges.

These minor ridges are best described under the names of the rivers which receive the waters that flow from their sides or summits. The west Derwent Ridge branches off from the High-Peak at the Great Axe-edge. It contains the sources of the brooks and other streams that fall into the western bank of the Derwent. This ridge might, indeed, be denominated the eastern ridge of the Dove. It separates the upper valleys of these rivers and their tributary streams; but, as it descends southward, and approaches the wide bed of the Trent, it becomes divided near the village of Brailsford. One range of diminished, but beautiful hills, spread eastward, and after encompassing the town of Derby with a variety of picturesque elevations, continues to embank the Derwent until the junction of that river with the Trent. The western range is lost as it approaches the streams and meadows between Egginton and Burton, where

> "Trent no longer mocks
> With cold repulse, but courts with ardent love
> The bright espousals of his own sweet murmuring Dove."
> *Edwards's Tour of the Dove.*

The east Derwent Ridge, from the sides of which arise the auxiliary rivulets that flow into the eastern bank of the Derwent, branches out from the northernmost extremity of the Peak. There the Blakelow-stone mountain joins the Yorkshire line by a chain of grit-stone rocks, called the Grinah, the Barrow, and the Dean-head-stones. From the east side of these flows the Trough, or Wrongsley river; and on the west the Etherow has its source. The line of elevations on the east of the Derwent commences at Dean-head-stones, and may be traced through part of Yorkshire and the whole of Derbyshire, until it is lost amongst the meadows of the Trent between Breaston and Sawley. One projection of this ridge juts eastward

CHAP. I. Minor Ridges.

as far as Sutton Hill in Nottinghamshire; and the valleys of the Erewash and the Nutbrook, have their western boundaries along that portion which stretches back into this county from Sutton towards Draycot. This important line of elevated land contains, along a course, varied in direction, and about seventy miles in extent, the sources of the Don, the Idle, and the Rother; while numerous branches diverge from it to the south and the south-west, and are drained by rivulets tributary to the Derwent.

From the British Alpine chain, already mentioned, near the northern or greater Axe-edge, other ridges branch out of less extent, but of considerable elevation, which bound the valleys of the Etherow, the Goyte, and other streams. The romantic river Wye has for the eastern boundary of the valley, or rather deep ravine, through which it flows, a branch ridge from the Alpine chain, commencing at Rushop-edge, and stretching out in abrupt rocky projections to the junction of the Wye and the Derwent at Rowsley; and for the southern and western limit of its vale, there is a bold branch of the west-Derwent ridge, which proceeds past Chelmerton and Over-Haddon. Another ridge, branching out of the west-Derwent ridge at Minning-Low, and crossing Stanton Moor to Great Rowsley, contains the springs of the Bradford, the Lathkil, and of other streams connected with the Wye.

An irregular branch of the Main or Alpine chain, enters Derbyshire from the south-west. This forms the southern heights of the valley of the Trent; and, separating into ridges, embanks the Mease, and contains the sources of numerous streamlets which fall into that river and the Trent.

Upon these ridges or tracts of high-land, Mr. Farey, the intelligent surveyor of the county for the Board of Agriculture, distinguishes no fewer than seven hundred points or particular mountainous elevations, noting down the strata on their sides and summits, and assigning to each the appellation by which it is known in its vicinity. His list, being alphabetical, cannot, without the aid of his map, afford the reader a sufficiently clear idea of the position of these eminences, along the tract or ridge to which they respectively appertain. We have altered his arrangement; and, selecting those which constitute the principal ridges in Derbyshire alone, we have enumerated them in order, commencing each list at the point where a smaller ridge branches from one of greater extent.

NAMES *of the several* MOUNTAINS, HILLS, *and* ELEVATED POINTS, *on the principal* RIDGES *or* TRACTS *of* HIGH-LAND *in* DERBYSHIRE, *with the strata on their summits or sides.*

N. B.—G. denotes Gritstone-rock; L. Limestone; T. Toadstone; *gr.* gravel; *cx. gr.* chertz gravel; *qz. gr.* quartz gravel; *sh.* shale; *sh. G.* shale grit; *C.* coal; *C. sh.* coal shale; *R. M.* red marl; *P.* peat; *cl.* clay; *Gy.* gypsum. The *figures* point out the order of the Limestone and Toadstone formations.

The GREAT BRITISH ALPINE *chain, from* Yorkshire *through* Derbyshire.
Holme Moss, Yorkshire, *G.*
Withen's Mouth, *P.* on *G.*
Abraham's chair, *G.*
Dean-head stones, *G.*
Barrow-stones, *G.*
Grinah stones, *G.*

These six Gritstone rocks are on the Yorkshire side of the boundaries.
Blakelow stones, *G.*
Wainstones, *G.*
Self-stones, *G.*
Alport Low, *G.*
Old Woman, *P.* and *sh.*
Close to the old Roman road, between Brough and Melandra.
Glead-Hill, *G.*
Whimbury Knots, *G.*
Kinder-Scout Hills, *G.*
Edale-Head, *G.*
South-Head Tor, *G.*
Chinley-churn, *G.*
Rushop Edge, *sh.* and *sh. G.*

Barmour Hill, 4 *L.*
Kems Hill Peak, 4 *L.*
Bole-end, Wormhill, 2 *L.*
Heathy Low, 2 *T.*
Nabs Buts, (hummock) 2 *T.*
Knots Low, 2 *T.*
Ridge Coit, Barmour, 3 *L.*
Combs Moss, *G.*
Thatch Marsh, *G.*
North Axe-edge, *sh.* and *sh. G.*
Middle Axe-edge, *G.*
South Axe-edge, *G.*

EAST DERWENT RIDGE.

Commencing at Deanhead-stones *in the* Great Alpine Chain.

Cut-Gate, *P.* upon *G.*
Alise-head, Ashover, *G.*
Hell-field Moor, *G.*
Lost-lad, Derwent Chap. *G.*
Dove-stone Tor, *G.*
Crow-chine, Bamford, *G.*
Derwent Edge, *G.*
Bamford Edge, *G.*
Stanage Hill, Hathersage, *G.*
Stanage Pole, Fulward, *G.*
Here, this ridge projects into Yorkshire.
Overstones, Hathersage, *G.*
Higger Tor, a hummock, *G.*
Scraper Low, *sh.* and *sh. G.*
Old Booth Edge, *G.*
Famous Peak Millstone Quarry.
Ox-stones, Hathersage, *G.*
Hathersage Ridge, *G.*
Shepherds' Moss House, *G.*
Gorsey Bank, Barlow, *G.*
Grange Top, *G.*
Bole Hill, *G.*
Pudding Pie Hill, *G.*
Bunker's Hill, Chatsworth Old Park, *G.*
Harwood Hill, Beeley, *G.*
Holly Moor Top, *G.*
Blakelow, Lit. Rowsley, *G.*
Roches Rock, Ashover, *G.*
Spite-winter Hill, *G.*
Stanage, Wingerworth, *G.*
Boythorp Hill, *G.*
Wingerworth Park, Chesterfield, *G.*
Fabrick Hill, *G.*
Deer-leap Hill, *G.*
Birkin Lane, Ashover, *C. sh.*
Bole Hill, Wingerworth.
Sheldon village, *G.*
Harstoff Common, *G.*
Cock Top, Tibshelf, *G.*
Over Moor, *C. sh.*
Here this Ridge *projects into* Nottinghamshire, *to* Sutton Hill.
Normanton Common, *C. sh.*
Cotes Park, Alfreton, *C. sh.*
Somercotes Green, *C. sh.*
Swanwick Wind-Mill Hill, *C. sh.*
Castle Hill, Pentrich, *G.*
Greenwich, Ripley, *C. sh.*
Codnor Park, *G.*
Breech Hill, Denby, *G.*
Roby Field, *G.*
Shipley Park, *G.*
Bredsall Moor, *G.* [Salmon coloured.]
Chaddesden Moor, *Cl.*
Hag Wind-Mill, Dale Abbey, *G.* [Salmon coloured.]
Dum's Hill, *qz. gr.*
Spondon Hill, *R. M.*
Clouds Hill, Sandiacre, *R. M.*
Risley Park, *R. M.*
Hopwell Hall, Ockbrook, *R. M.*

WEST DERWENT, OR EAST DOVE RIDGE.

Commencing at Axe-Edge *in the* Great Alpine Chain.

Thirkelow, Brand, 4 *L.*
High Edge, 4 *L.*
Harper Hill, Buxton, 4 *L.*
Fox Low, 4 *L.*
Staden Hill, 3 *T.*
High Cliff, Cowdale, 4 *L.*
Hill Head, Hartington, 4 *L.*
High-Low, 4 *L.*
Croom Hill, 4 *L.*
Park House Hill, 4 *L.*
Brierly Hill, 4 *L.*
Dow Low, 4 *L.*
Alders Cliff, 4 *L.*
High Wheeldon, 4 *L.*
Cronkstone Hill, 3 *L.*
Hurdlow Hill, 4 *L.*
Great Low, 4 *L.*
Overstreet Hill, 3 *L.*
Hurdlow House Hill, 2 *L.*
Wagon Lows, 4 *L.*
High Cross, 4 *L.*
Cliff Hill, 4 *L.*
Mossey Low, 4 *L.*
Cardel Low, 4 *L.*
Coatsfield Low, 3 *L.*
Benty-Grange Hill, 2 *L.*
One Ash clump, Monyash, 1 *L.*
Lean Low, Heathcote, 4 *L.*
Castern Low, 4 *L.*
Hen-Low, Heathcote, 4 *L.*
Bullock-round, Hartington, 4 *L.*
Pine Low, 4 *L.*
Wolfscote Hill, 4 *L.*
Cross Low Bank, Alsop, 4 *L.*
Mote Low Arbor, 4 *L.*
Nabs Hill, 4 *L.*
Thorpe-Cloud, Thorpe, 4 *L.*
Arbor-Low, Middleton, by Yolgrave, *cz. gr.* on 2 *L.*
This eminence is nearly two miles north of Newhaven: *it is very high, with a* Druidical circle *of large stones on it.*
Callenge Low, Yolgrave, 1 *L.*
End Low, 1 *L.*
Gratton Low, 1 *L.*
Hillock-Low, or Elklow, near Newhaven, 4 *L.*
Gotam Hill, Bradborne, 4 *L.*
Minning Low, near Pike Hall, 4 *L.*
Gallows Low, 4 *L.*
Great Edges, 3 *L.*
Little Edges, Aldwark, 3 *L.*
Sharrat Cliff, 3 *L.*
Moot Low, 4 *L.*
Elder Tor, Brassington, 4 *L.*
Peterson Pike, 4 *L.*
Hoe Cliff, 4 *L.*
Ipley Hill, 4 *L.*
Reynard's Tor, 4 *L.*
Ryda Hill, Brassington, 4 *L.*
Hamborough Rocks, 3 *T.*
This mass of elevations is very high, with a well and hermitage *at the top.*
Chariot-clump, near Hopton, *cz. gr.* on 3 *T.*
Barn Hill, 3 *L.*
Hascar Hill, *sh.* and *sh. G.*
Copt-Holly-Hill, Kirk Ireton, *sh.* and *sh. G.*
Blackwall Hill, *qz. gr.* on *sh.*
Cliff Ash Hill, *qz. gr.* on *sh.*
Gib Hill, *sh.*
Wardgate Hill, Hulland, *gr.*
Hullandward village, *sh.*
Derby Hill, Hulland, *qz. gr.* on *sh.*
Mansel Park, *sh.* and *gr.* on *R. M.*
Brailsford Hill, *gr.* on *R. M.*
Snaper Hill, Brailsford, *R. M.*
Priestwood Hill, near Meynel, Langley and Kedleston, *R. M.*
Rough Heanor Hill, *R. M.*
Radbourn Hall, *R. M.*
Mickleover town, *R. M.*
Burnaston Hill, Etwall, *R. M.*
Coneygree, Willington, *gr.* on *R. M.*
Littleover town, *gr.* on *R. M.*
Stenson Hill, *gr.* on *R. M.*
Swarkstone Lows, *gr.* on *R. M.*
Peter's Hill, Derby, *gr.* on *R. M.*
Normanton, near Derby, *R. M.*
Chellaston Hill, *Cl.* on *Gy.* and *R. M.*
Wyman's Hill, Aston, *R. M.* and *Gy.*
Weston Cliff, and Free Stone Quarries, *R. M.*
Ballington Hill, Ambaston, *R. M.* and *Gy.*

RIDGES OF THE WYE.

Eastern Ridge.

This Ridge *branches from the* Great Alpine Chain *at* Rushop Edge.
Lord's seat, Castleton, *sh.* and *sh. gr.*
Mam-Tor, *sh.*
This eminence is high, and is remarkable for its falls or slips.
Lose Hill, Castleton, *sh.* and *sh. gr.*
Windy Knowl, Castleton, 4 *L.*
Tra-Cliff, south-east of Mam-Tor, 4 *L.*
On the Winnet's Road: *it contains* Fluor mines.
Castle-Hill, Castleton, 4 *L.*
Little Elden Hill, 4 *L.*
Great Elden Hill, 4 *L.*
Hentley Hill, 3 *L.*
Edingtree Hill, Bradwell, 3 *L.*
Eccles Hill, Hope, *sh.* and *sh. G.*
Long Cliff, Castleton, 4 *L.*
Ox Low Peak Forest, 4 *L.*
Copt Round, 3 *L.*
Nel's Low, 3 *L.*
Damcliffe, Peak Forest, 4 *L.*
Whetstone Bank, 3 *L.*
Summercross Hill, Tideswell, 2 *L.*
Tenter Bank, 2 *L.*
Bathem-Edge, Tideswell Moor, 3 *L.*
Tideslow Top, 3 *L.*
Litton Edge, near Tideswell, 1 *L.*
Longroods Hill, Foolow, 1 *L.*
Wardlow Top, Wardlow, 1 *L.*
Wardlow Hay, 1 *L.*
Blakelow Tor, Great Longsdon, 1 *L.*
Beacon Tor, Stoney Middleton, 1 *L.*
Calver Peak, 1 *L.* with Quarries.
Fin Copt, Ashford, 1 *L.*
Crackendale-head, Bakewell, 1 *L.*
Bow cross, Bakewell, *sh.* and *sh. G.*

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Haddon Park, *sh.* and *sh.* G.
Cawton Hill, *sh.* and *sh.* G.
South and south-west Ridge.
This Ridge *may be considered as branching from the* Great Low *and* Hurdlow Hills, *on the* west Derwent *or* east Dove Ridge.
Blindlow Top, Chelmerton, 3 *L.*
Chelmerton Thorn, 3 *L.*
Sough Top, 2 *L.*
Chelmerton Low, 2 *L.*
Cawton Hill, *T.* and 3 *L.*
Chee Tor Hill, near Wormhill, 4 *L. tilted.*
Wham Rake Head, Taddington, 2 *L.*
Slipper Low, 2 *L.*
Priestcliff Lees, 2 *L.*
Priestcliff Low, 2 *L.*
Pet Hill, near Monsal Dale, 2 *L.* and 2 *T.*
Wood Head, Taddington, 2 *L.*
Dimin's Dale Top, 2 *L.*
High Low, Monyash, 1 *L.*
Here is the celebrated Birds'-Eye Marble Quarry.
Sheldon town-end, 1 *L.*
Shack-Low, Sheldon, 1 *L.*
Bole Hill, Sheldon, 1 *L.*
Ricklow-Dale Head, Hunter's Meer, 1 *L.*
Dirtlow Hill, Bakewell Moor, *sh. L.*
Here are Rottenstone Pits.
Harrack Hill, Ashford, *sh. L.*
Haddon-field, Bakewell, 1 *L.* and *sh.*
Here are Lime Quarries.

RIDGES OF THE SHELF.

The *north Ridge* of this small river, projects from the *self-stones* of the *Great Alpine Chain*, and contains two elevated points.
Glossop Low, Glossop, G. with *grey st.*
Mouse Low, G.
The *southern Ridge* begins at *Glead Hill*, on the *Great Alpine Chain.*
Hollingsworth Head, G. and *C. sh.*
Combs Rocks, near Charlesworth, G.
Picking-stones, Chisworth, G.
Ernscroft Barrows, G.
Cobden Edge, Mellor, G.
Eaves Knoll, New Mills, G.

RIDGES OF THE NOE, OR NOW.

North Ridge.

This commences at Kinder-Scout *in the* Great Alpine Chain.
Seal-stone Hill, Rowlee, G.
Crookstone Hill, and Knowl, G.
Win-Hills, Hope, *sh.* and *sh.* G.
These hills are three remarkable hummocks.

South Ridge.

This ridge may be considered as branching out of the east Wye Ridge at Windy-Knowl, about a mile from Castleton.
Bur Tor, or Hucklow Edge, *sh.* and *sh.* G.
Sir William Hill, Eyam, G.
The old Sheffield turnpike road went over this lofty eminence.
Rock Hall, Eyam, G.
Riley Hill, Eyam, *sh.* and *sh.* G.
Blakelow, near Bradwell, *sh.* and *sh.* G.
Shatton Edge, near Hope, *sh.* and *sh.* G.
High-Low, Abney, *sh.* and *sh.* G.

ASHOP RIDGE.

This Ridge *is a projection of the* Great Alpine Chain, *commencing at* Blakelow stones, *where the* Ashop *has its source.*
Alport-Castle Hills, Rowlee, *sh.* G.
Rowlee Peat Pits, on *sh.* G.
Crook Hills, two hummocks, G. on *sh.*

LATHKIL, OR BRADFORD RIDGES.

The north *or* north-west ridge *of these united streams, is the same as the* south *and* south-west ridge *of the* Wye. *On the* south *of the ravines through which they flow*, the following elevations *constitute* two irregular ridges.
Blakelow, near Elton, 1 *L.*
Islington Hill, Winster, 2 *L.*
Gree Tor, Winster, 1 *L.*
Bank pasture Tor, 1 *L.*
White Low, Bonsal, 3 *L.*
Wensley village, *sh.* and 1 *L.*
Oaker Hill, Wensley, *sh.* and *sh.* G.
Masson Low, Matlock, 2 *T.*
Heights of Abraham, Matlock, 1 *L.* and 1 *T.*
Berry-cliff, Elton, G.
Hartle Moor, Yolgrave, G.
Mock-Beggar Hall, Elton, G.
Stanton Moor, Winster, G.
Rowter Rocks, Birchover, G.

THE ROTHER RIDGES.

The *west Ridge*

branches from the east Derwent Ridge *at* Shepherd's Moss Hill House, *near* Holmesfield.
Lygate Hill, Holmesfield, G.
Holmesfield village, G.
Hill-Top, Dronfield, G. and *C. sh.*
High-field-farm, G.
Bradway Cross, Totley, G.
Bole-Hill, Norton, G.
Cole Aston village, G.
Moor-top-House, Dronfield, G.
Bramley Moor, Eckington, G.
Renishaw Hill, G.
Middle Handley, Staveley, G.
Glass House Common, Whittington, G.
One-stone Hill, Dronfield, G.
Herding Hill, Norton, G.
High-lane Hill, Eckington, G.
Berley Common, Hardenthorpe, G.
Mosborough Hall, G.

The *east Ridge*

commences at Overmoor *near* Tibshelf, *between Derbyshire and Nottinghamshire, on the* east Derwent Ridge.
Hardwick Park, *yellow L.*
Hault-Hucknal village, *yel. L.*
Glapwell Summer Hill, *yel. L.*
Bolsover town, *yel. L.*
Bolsover Moor, *yel. L. with Quarries.*
Nun's Hill, Bolsover, G. *with grindstone Quarries.*
Barlborough, *yel. L.*
Marston Moor, Barlborough, G.
Holly-Hill Clown, *yel. L.*
Whitwell Hill, Whitwell, *yel. L.*
Spink-Windmill-Hill, G.
High Moor, Killamarsh, *C. sh.*
Knitaker Hill, Barlborough, *yel. L.* on *C.*
South Anston Hill, in Yorkshire, *a few miles beyond the boundaries of this county, remarkable for its* yellow Lime *and* salmon-coloured Grit.

DOLEE RIDGE

branches from the east Derwent Ridge at Harstoft Common, *in* Hault Hucknal.
Compton Common, near Winfield, G.
Temple Normanton, G.
Heath-Hill, G.
Sutton Hall, Scarsdale, G.
Bole Hill, Calow, G.
Upper-Lane-Farm, Hady, *C. sh.*
Brimmington town, G.
Inkersall, Staveley, G.
Hawthorn Hill, Staveley, *C. sh.*

AMBER RIDGES.

The *west Ridge*

projects from the east Derwent Ridge *at* Harwood-Hill, Beeley, west of Chesterfield.
Ashover-Quarry, (Grindstones) G.
Wirestone Hill, Ashover, G.
Haredge, Matlock, G.
Overton Park, Ashover, G.
Slag Hills, Dewey-Hole-Lane, G.
Riber Top, Matlock, G.
High Tor, Matlock, 1 *L.*
High Lees, Harston, G.
Castle Top, Cromford, *sh.* and *sh.* G.
High Ore-Dish, Brackenfield, G.
Hay Hill, Ashover, G.
Ogstone Hill, Moreton, G.
Washington Green, Crich, *C. sh.*
Lindow-lane-Hill, Ashover, G.
Wheatcroft village, *C. sh.*
Upper Holloway, Crich, G.
Crich-cliff, Crich, 1 *L.*
Very high, with a monument.
Park-Lane-Head, Crich, G.
Coburn Hill, south Winfield Park, G.
Fritchley Hill, Crich, G.
Crich-Chase, Crich, G.

The *south Ridge*

rises amongst the elevations of the east Derwent Ridge *about* Ripley.
Ripley village, Pentrich, G.
Stone Hill, Belper, G.
Belper Windmill Hill, G.
Toadman Hill, Belper Ward, G.

ECCLESBURN RIDGE

branches from the west Derwent Ridge *at* Barn Hill, Hopton, *near* Wirksworth.
Middleton Intake, Wirksworth, 3 *L.*
Middleton Moor Race Course, 3 *L.*
Dunrake Hill, Middleton, 1 *L.*
Middle Peak, Wirksworth, 3 *L.*
Bolehill Edge, Wirksworth, *G.*
Stone House Rocks, Cromford, *G.*
Longway Bank, Alderwasley, *G.* and *C. sh.*
Alderwasley Wind Mill Hill, *G.*
Alport Hill, Spout, *G.*
Coneygree Hill, Spout, *G.*
Chevin Hill, Belper, *G.*
Mount Pleasant, Belper, *G.*
Alton Hill, Shottle, *sh.* and *sh. G.*
Hill Top, Shottle, *sh.* and *sh. G.*
Shottle Gate Hill, *sh.*
Far Low, Belper, *G.*
Hazlewood Hill, Belper, *sh.*
Milford Bank, near Belper, *G.*

BOOTLE-BROOK RIDGE.

This Ridge *is a projection from the* south Amber Ridge, *commencing at* Ripley village.
Henmore, near Belper, *G.*
High-wood, Bar-Gate, *G.*
Holbrook Moor, *G.*
Duffield Bank, *G.*

NUTBROOK RIDGE

branches from Roby Field, Denby, *on the* east Derwent Ridge.
Heanor Windmill Hill, *qz. gr.* on *C. sh.*
Shipley Wood Hill, Ilkeston, *G.*
Ilkeston Hill, *G.*
Little Hallam Hill, *G.*

MORLEDGE RIDGE

branches off the west Derwent Ridge at Hulland-ward village.
Cross-o'-th'-Hands, Turnditch, *qz. gr.* on *sh.*
Flowery Hill, Turnditch, *qz. gr.* on *sh.*
Bull-hurst, Muggington, *qz. gr.* on *sh.*
Gun Hill, Windley, *qz. gr.* on *sh.*
Burley Hill, Duffield, *qz. gr.* on *sh.*
Quarn Hill, Allestry, *qz. gr.* on *sh.*
Allestry town, *R. M.*
Darley Hill, near Derby, *R. M.*

SHOO RIDGES.

The *northern Ridge*

commences with the Toadstone bassets *called the* Harborough Rocks, *on the* west Derwent Ridge.
Larle Tor, Brassington, 4 *L.*
Kniveton Hill, *sh. L.*
Maghill-Bowse-Clump, Atlow, *sh. L.*
Heaver-Clump, Kniveton, *sh. L.*
Ashbourn Windmill Hill, *sh.*

The *south Ridge*

extends in irregular elevations from Gib-Hill *in* Kirk Ireton, *on the* west Derwent Ridge, *and includes the valleys of four small streams or brooks.*
Hough-Park-Clump, Bradley, *qz. gr.* on *sh.*
Bradley Park, *qz. gr.* on *sh.*
Yeldersley-Wood, Bradley, *qz. gr.*
Supposed to cover *Coal.*
Shirley Common, *qz. gr.*
Supposed to cover *Coal.*
Hollington Village, *R. M.*
Edlaston village, *loamy qz. gr.*
Supposed to cover *Coal.*
Alkmanton village, *R. M.*
Boylstone Hill, *R. M.*
Hoon Hill, Church Broughton, *R. M.*
Snelson Common, *loamy qz. gr.*
Supposed to cover *Coal.*
Birchwood Park, Roston,
Supposed to be an isolated *yellow limestone rock.*
Birchwood Moor, Roston, *sandy gr.*
Supposed to cover *Coal.*
Hare-Hill, Sudbury, *qz. gr.* on *R. M.*
Marston Park, *R. M.*
Up-wood, Doveridge, *R. M.*

EAST DOVE RIDGE.

The west Derwent Ridge *necessarily forms a great part of the* east Dove Ridge, *but* that Ridge, *when it reaches the* Toadstone bassets *at the* Harborough Rocks, *divides into several branches, of which the most eastward continues to form an embankment for the* Dove *until its union with the* Trent.
Longlane Hill, Upper Thurvastone, *R. M.*
Cro-po-Top, Sutton-on-the-Hill, *R. M.*
Ash, Sutton-on-the-Hill, *R. M.*

HILLS IN DERBYSHIRE,

South of the Trent.

The Ridges of elevated ground *between the* Trent *and the* Mease *are very confused. They properly form portions of the* Leicester Forest branch *of the* Great Alpine chain. *We shall therefore confine ourselves to an enumeration of them in* Alphabetical order.
Askew Hill, Repton, *R. M.*
Bladon Hill, Newton Solney, *gr.* on *R. M.*
Bretby Clump, Bretby, *R. M.*
Brislincote Hill, Stapenhill, *R. M.*
Burrow Fields, Walton, *R. M.*
Butt-House, Blackfordby, *R. Cl.*
Upon the borders of Derbyshire and Leicestershire.
Cad-House Lane, Ticknal, *qz. gr.*
Cadley Hill, Church Gresley, *qz. gr.*
Chilcote Hill, Stretton, *R. M.*
Church Gresley town, *C. sh.*
Coton Park, Lullington, *R. M.*
Croxall Hill, Croxall, *R. M.*
Derby Hills, near Ticknall.
Donisthorpe, near Measham.
Honey Hill, Chilcote, *R. M.*
Upon the borders of Derbyshire and Warwickshire.
King's Newton, Melbourn, *R. M.*
Linton Village, Church Gresley, *gr.* on *R. M.*
Lullington village, *gr.* on *R. M.*
Midway Houses, Hartshorn, *R. Cl.*
New Hall, Windmill House, Bretby, *G.*
Odd House Hill, Measham, *R. Cl.*
Old Park, near Smithsby.
Pistern Hill, Smithsby, *G.*
Repton Hill, Repton, *R. M.*
Roleston town, *gr.* on *R. M.*
Scropley Hill and Clump, *R. M.*
Smithsby Common.
This appears to be alluvial blue clay upon red clay.
Stanton Hill, Newhall, *gr.*
Willesley Hill and Wood, *R. Cl.*
Wooden Box, Hartshorne, *R. Cl.*

This view of the elevated parts of the county, from the grit-stone of the Peak to the red-marl, or, as some authors denominate that rich prolific earth on the banks of the Trent and the lower Derwent, the red-loam, of the southern district, presents, we conceive, as correct an idea of the diversity of strata, as could be done by a geological map. The heights of some of the loftiest mountains in these ridges have been ascertained, but the investigation and description is far from being complete. In the list of "Altitudes of the stations and other remarkable hills," calculated during the

CHAP. 1. progress of the Trigonometrical survey, under the direction of Col. Mudge, the following are given as the chief eminences in Derbyshire.

Ax-edge	1751 feet.
Hathersage	1377
Holme Moss (Kinderscout) ...	1859
Lord's seat	1751
Alport (or Orpit) heights	980

Valleys.

VALLEYS, and the beds of rivers, have a natural connexion with each other, or, rather, they would be identically the same if the theory of Dr. Hutton and Professor Playfair were true, who have asserted "that all valleys have been excavated by rivers that flow through them." But it appears to be now generally admitted by geologists, that other and more powerful causes must have combined in the formation of valleys; and that, as far as water has been an agent, we must rather contemplate the force of a deluge, than the erosive powers of even the largest or most rapid rivers.

The valleys of Derbyshire are extremely interesting, not only on account of the rock and river scenery with which they abound, but because, as Mr. Farey observes, they afford the miner and geologist "situations for examining and comparing the edges of corresponding strata, on the two sides of a valley, the ledges of rock in its bottom, and of studying the truly surprising and powerful causes that have operated in the formation of valleys."

Narrow, precipitous valleys have, undoubtedly, stronger claims upon the artist and the scientific student than those of wider extent. The continuity of their cliffs is more majestic, their projections are bolder, and their chasms are more abrupt and awful: they present the order of the strata more clearly to the research of the geologist, and more accurately and intimately disclose to him some of nature's abstrusest secrets. We shall subjoin, with a few omissions and alterations, the list of these defiles or rocky valleys, as given by the author of the Agricultural Survey; pointing out to the mineralogist and geologist, those objects that may be conducive to a correct knowledge of our basaltic and calcareous rocks, and their mineral productions. At the same time, we would have it understood, that, although we do not particularise the wider valleys, they are not without beauty, nor are they deficient in objects of instructive interest. The meadows and cornlands intervening amidst the gritstone rocks that appear and disappear along their sides, are objects of bright and picturesque contrast, frequently replete with sources of encouraging reflections. "The hand of industry," says Mr. Rhodes, in describing Hope-Dale, "was busily employed in this rude place, where stone walls, intersecting each other at right angles, have obtruded on the wildness of these moorland wastes, and robbed them of a beauty which they once possessed. In a few years they will wear a different appearance, and corn will wave where the yellow gorse and the purple heath now flourish; and the oak, the ash, the elm and the pine, will each contribute to enrich and ennoble the scene."*

* Peak Scenery, Part I.

An Alphabetical LIST *of the* NAMES *of the principal* NARROW *and* ROCKY VALLEYS, *or* DEFILES, *with precipitous* CLIFFS, *in and near to* DERBYSHIRE, *describing their* SITUATIONS, *the* STRATA *exhibited in their sides and bottoms, and the* NAMES *of the most noted* ROCKS, CAVERNS, *&c. in each.*

Barbrook Dale, NE of Baslow, about ¾ m. long, E of Derwent river, in the NE direction; cliffs and loose blocks of 1st grit rock, a lead cupola, slag-mill and sulphur work in it.

Berresford Dale, S SW of Hartington, between Derbyshire and Staffordshire, extending about ¼ m. S along the course of Dove river, in 4th lime; ruins of a castle.

Bonsal Dale, S of the town, extending nearly W 2 m. from Cromford town to Griffe and Via Gellia dales, with branches on the N up to the town; 1st, 2nd, 3rd and 4th lime rocks, and 1st, 2nd and 3rd toadstones, tufa at Marygrot spring, hot springs formerly: very deep and striking, with a good turnpike road through it, towards Buxton: it has two lead cupolas and slag-mills, a sulphur work, calamine works, a stone saw-mill, &c. in it.

Bradford Dale, S and SW of Yolgrave, extending about SW 1¾ m. from Lathkil dale; shale, 1st lime, and 1st toadstone (in the river SW of Yolgrave) slither, or indestructible and barren lime-rubble on its sides; a prodigious large spring at Middleton.

Bradwell Dale, S of the village, extending thence S about ½ m. in 1st lime, with black chert nodules in very regular layers.

Brook-bottom Dale, N NW of Tideswell, extending about 1¼ m. from the town, 2nd lime, and 2nd toadstone (in the brook at its NW end); black marble of the 2nd lime rock, is dug here, an ebbing well formerly; road through it, towards Chapel-en-le-Frith.

Burbadge Dale, N NE of Nether Padley, extending N NE about ¼ m. in 1st grit, with grindstone quarries.

Callenge Dale, SE of Monyash, a branch from Lathkil dale S, 1st lime, slither.

Cave Dale, SW of Castleton, extending 1 m. from the town, 3rd lime, 3rd toadstone, and 4th lime at its W end; a very narrow entrance from the town, columnar toadstone.

Combs Dale, S of Stoney Middleton, extending from near Calver W SW about 1½ m., deep, in 1st lime, and toadstone at High-field soughmouth.

Cressbrook Dale, SE of Litton, extending about 1½ m. N from the Wye at Monsal dale; 1st lime, and 1st toadstone at N end; 2nd lime, and 2nd toadstone, and 3rd lime at S end; slither, hobsthrust rocks.

Cresswell Crags, E of Elmton, between Derbyshire and Nottinghamshire, extending E about one third m. in a lifted part of the yellow lime, small caverns.

Cummins Dale, E of Buxton, extending from Dale-end mill on the Wye about ¼ m. NW, 4th lime, with a crystallized granular bed of limestone on S side; a dry dale, owing to the swallow-holes at Water-swallows above.

Deep Dale, N of Brierley-foot toll-bar, near Chelmerton, extending about ½ m. S SW from Marl dale, 4th lime.

Devil's Bowling-alley, N of Alderwasley, extending from the Derwent one third m. SW, 1st grit, with large loose blocks.

Dimins Dale, NW of Sheldon, extending from near the Wye river SW about 1¼ m., 1st lime at SW end, 1st toadstone, and 2nd lime.

Dove Dale, N NW of Thorpe, between Derbyshire and Staffordshire, extending northward nearly 5 m. along the course of the Dove, surprisingly deep in the 4th lime, much slither, but no loose blocks: the high and isolated rocks in this grand dale are called, Dove-dale Church, Lover's Leap, Pickerings, Sugar-Loaves, Tissington-Spires, Thorpe-Cloud (at the S end) &c. Reynard's Hall and Cave, and Dove-hole, are curious caves; there is here also, a fine natural arch at Reynard's Hall: many very wide and barren or dead veins, cross this dale obliquely.

Devonshire Dale, NE of Fairfield, extending about 1¼ m. N NW from Great-Rocks dale, in 4th lime, a dry dale, owing to swallow-holes at Dove-hole cotton-mill.

Eyam Dale. See *Middleton Dale.*

Flag Dale, SW of Wormhill, extending about 1 m. NW from the Wye river at Chee Tor, in 4th lime, with 3rd toadstone along its NE border; large springs at its SE end.

Grange-mill Dale. See *Griffe Dale.*

Grass Dale, NE of Wormhill, extending about 1 m. N NW from Monks dale to Hay dale, 3rd lime at S end, 3rd toadstone, and 4th lime at N end; a dry dale, owing to swallow-holes in this and Hay dale above.

Great Rocks Dale, W of Wormhill, extending 2½ m. from the Wye N NW to Dovehole dale, in 4th lime, with sunk pieces of 3rd toadstone in it; near the Buxton road; a dry dale, owing to the swallow-holes at Dove-hole cotton-mill above.

Griffe Dale (or Grange-mill Dale) S of Grange mill, extending thence southward about 1¼ m. to Via Gellia and Bonsal dales, in 4th lime, 3rd toadstone at its N end; a new turnpike road through it.

Hamps Dale, in Staffordshire, N NE of Caldon, extending about 2¼ m. S SW from Ilam and Wetton dales at Beaston tor, in 4th lime. The channel of the Hamps river is here dry, when not swoln by great rains, and its waters, which fall into swallow-holes at Waterfall and Waterhouses, pass more than 3 m. under ground to Hamps springs, W of Ilam Hall.

Hay Dale, S of Peak Forest town, extending about 1 m. N from Grass dale, in 4th lime; a dry dale, below the swallow-holes near its N end.

Hay Dale, S of Wardlow, extending N about 1 m. from Monsal dale, in 2nd lime, with 1st toadstone at its N end, and nearly along its eastern border; vast beds of slither, or indestructible and barren lime-rubble, on its E side.

Hipple Dale, W of Brassington, extending about ½ m. N NE, with a branch E, in 4th lime; a prodigious spring breaks out at its S end, near the great limestone fault, about once in twenty years.

Ilam Dale, in Staffordshire, NW of the town, extending thence nearly 3 m. to the Hamps and Wetton dales, 4th lime. The channel of the Manifold river is here dry in dry seasons, owing to the vast swallow-holes at Darfa cliff, waterfall and waterhouses above, until the great Hamps and Manifold springs break out, in and near to Ilam gardens; Beaston tor rock at its NW end.

Lathkil Dale, N and E of Yolgrave, extending from near Stanton to near Monyash about 5½ m.; shale near Alport, 1st lime, 1st toadstone and 2nd lime S of Over Haddon, tufa at Alport, slither, Raventor rock near Alport.

Markland Grips, NE of Elmton, extending NE

CHAP. I.

about ¾ m. to Cresswell upper mill, in yellow lime.

Marl Dale, NW of Chelmerton, extending S SW about 1¼ m. from the Wye river to Deep dale, 4th lime; a large cavern.

Matlock-Bath Dale, SW of Matlock, extending nearly N along the course of the Derwent river more than 2 m. from Cromford cotton-mills; shale S of High Tor, 1st lime, 1st toadstone, 2nd lime and 2nd toadstone at the foot of High Tor; tufa, petrifying springs, hot springs and baths; High Tor, Scarthen cliffs, Wild-cat Tor rocks, &c. Cumberland cavern: a good turnpike road through this beautiful dale, towards Bakewell.

Meadow Dale, S of Tideswell, extending W about ½ m. from Tideswell dale; 3rd lime, and 3rd toadstone at its E end.

Middleton (or Eyam) Dale, W of Stoney Middleton town, extending thence about 1¾ m. W, 1st lime, deep and romantic, with several deep collateral branches; Castle, High Tor, Steeple and Lover's Leap rocks; Bamford, Charleswark and Merlin's caverns: a lead cupola and slag-mill, and sulphur work; a good turnpike road passes through this curious dale between Tideswell and Sheffield.

Mill Dale, E of Buxton, extending about ¾ m. NW from Sherbrook and Wye dales, 3rd lime at its NW end, 3rd toadstone and 4th lime, white marble; a good private coach-road through this dale.

Mill Dale, in Staffordshire, S of Alstonfield, extending W about 1 m. from Dove dale; deep and rugged, in 4th lime.

Miller's Dale, SE of Wormhill, extending W about 1½ m. along the course of the Wye river, from Monsal dale to Wye dale and Sandy dale; 3rd lime, with 2nd toadstone and 2nd lime skirting its S border and parts of its N border; the 3rd toadstone appears in the river, about its middle and at its W end, tufa. Ravens Tor, and other bold and high rocks skirt this dale.

Monks Dale, E of Wormhill, extending N NW about 1¼ m. from the Wye at Millers dale to Grass dale: in 3rd lime, the 3rd toadstone seen at its N end, where the Buxton and Tideswell road crosses it, and the 2nd toadstone skirts both sides of it at the S end: tufa is found in it at the S end; a dry dale, owing to swallow-holes in Hay and Grass dales above.

Monsal Dale, NW of Ashford, extending about N NW by a crooked course (along with the Wye river) of about 2¾ m. from the W face of Fin Copt hill to Miller's dale; in 2nd lime, 2nd toadstone, and 3rd lime at its northern end, having the 1st toadstone and 1st lime on its eastern skirt at the southern end, and the 2nd lime along all its western skirt or border: much slither, or indestructible and barren lime-rubble is lodged on the sides of this valley; black marble of the 2nd lime is dug here, near Little Longsdon.

New-Mills Dale, S of the village (in Glossop) between Derbyshire and Cheshire, extending about W one third m. from the junction of New-Mills brook with the Goyte river, in 3rd grit and coal shale, called Tor Cliff. This is a very singular and striking grit-stone valley.

Pleasley Forge Dale, E of the town, between Derbyshire and Nottinghamshire, extending E about ½ m. in yellow lime. Hobsthrust and other bold rocks are here much admired; a large cotton-mill occupies the site of the ancient iron forge.

Ricklow Dale, E of Monyash, extending nearly N about one third m. in 1st lime; entrochi marble is here dug.

Sandy Dale, S SE of Wormhill, extending S SW about ¾ m. from Wye dale to near Blackwall village, in 3rd lime, and 3rd toadstone at its southern end: the 2nd toadstone skirts its eastern border at the northern end, and produces numerous quartz crystals, or Derbyshire diamonds.

Sherbrook Dale, SE of Buxton, extending nearly SW about 1¼ m. from Wye and Mill dales, in 4th lime, and a patch of 3rd toadstone, at the crossing of the Buxton and Ashbourn road, whence a private coach-road proceeds through this dale eastward.

Small Dale, SW of Peak Forest town, extending NE about ½ m. from Dove-hole dale, in 4th lime, which on the sides of this dale assumes a columnar structure.

Thatch Dale, W of Wheston, near Tideswell, extending E about one third m. from Grass dale, 3rd lime and 3rd toadstone; 4th lime on its N skirt.

Tideswell Dale, S of the town, extending therefrom 1 m. to Millers dale, in 3rd lime and 3rd toadstone, which is thrown up therein by a fault: the 2nd toadstone skirts along near its E border; tufa is found in it at its S end. It is often a dry dale, owing to the swallow-holes at the S end of Tideswell town.

Via-Gellia Dale, N of Hopton, extending about ¾ m. S from Bonsal and Griffe dales, in 4th lime. The Hopton-wood freestone quarries are on the E side of this dale, just below the 3rd toadstone basset. Mr. Gell's private road passes through this valley.

Walley Furnace Dale, N of Over Langwith, extending about ¾ m. nearly N, in yellow lime.

Wensley Dale, S of the village, extending ½ m. E SE, in 1st lime.

Wetton Dale, in Staffordshire, W of the town, extending nearly N about 1½ m. from Hamps and Ilam dales; deep in the 4th lime. Thor's House Tor is a remarkable rock with a natural arch and cave, by this dale, which is dry in dry seasons, below Darfa swallow-holes, which suddenly absorb this considerable river, after it has crossed the great limestone fault.

Winnets Dale, W of Castleton, extending about ½ m. W, in 4th lime, deep and rugged; the turnpike road to Chapel-en-le-Frith goes up this steep and curious valley.

Wirksworth Dale, in NW end of the town, extending NW about one third m. in 3rd lime.

Woo Dale, E of Buxton, extending N about ¾ m. from Wye dale, in 4th lime.

Wye Dale,* E of Buxton, extends E about 4 m. from Mill and Sherbrook dales to Miller's dale, in 4th lime, and 3rd toadstone at its E end, the 3rd lime there also skirting it on each side. Chee Tor, Peterson Pike, and Lover's Leap, are noted rocks in this dale, which has some slither in it, particularly opposite to Chee Tor in Wormhill, where are two very large springs of water.

Caverns.

Amongst the objects that render the High and Low Peak of Derbyshire particularly interesting to visitors of every description, are their remarkable caverns. Respecting the formation of these subterranean cavities, the most intelligent enquirers are still in dispute. Mr. Bakewell, who, as we have

* Sometimes the term *Wye Dale* is used to designate the entire limestone valley from Buxton to Bakewell, in which sense, it includes Mill dale, Miller's dale, Monsal dale, &c.

seen, rejects, with reason, the agency of rivers as inadequate to the formation of valleys, is nevertheless, "inclined to believe that the caverns have been formed by the agency of water, percolating through natural fissures, and in the lapse of ages excavating the softer or more broken parts of the rock;"* but there are phenomena, universally belonging to caverns, which, while they prove that all such internal cavities have owed their existence to similar causes, seem themselves to have originated in other powers besides "the prodigious force with which these subterranean streams rush through the openings of some of these caverns, after continued rains."†—Mr. Pilkington attributes their formation chiefly to the clefts or fractures in the limestone measures, which, he says, "generally turn in angles or curves, and sometimes swell into large caverns."‡ This curvature or swelling is common to all the caverns in this county; and, in our present imperfect state of knowledge, we are reluctantly left to attribute the combinations of circular forms, which constitute the general characteristics of caverns, to certain contortions of fracture, and to the attrition made by whirlpools in confined currents of running water. Mr. Mawe, in his Mineralogy of Derbyshire states, that "the entrance and roofs generally assume an arched appearance; and though the tops of the caverns are frequently irregular, they almost always form the segment of a circle; the sides generally rise nearly perpendicular, while the bottoms are more flat." And further on, he adds, "a prodigious variety of round or spherical holes occurs in the roofs, some two, three, four, and six feet in diameter, and as deep; they preserve a very correct round form: and often smaller ones appear in them, as if formed by art." It is always in the lower beds of that stratum called the upper-transition-limestone, that caverns are discovered. This stratum is described by Mr. White Watson, under the appellation of compact-limestone; and he adds, "that its colour is a blackish grey, and that it contains minute entrochi, interspersed with particles of sulphuret of iron." The upper beds of this stratum are much broken by the convexity of the under ones, and the fissures with which it consequently abounds, are frequently filled with spars and minerals.

CHAP. 1. Caverns.

A cleft in this stratum of limestone at Castleton, has been the origin of that most remarkable of the Derbyshire caverns, called Peak's Hole, or the Devil's cave; while the action of water, and the concealed chemistry of nature, have imparted to it much of its internal form, and have furnished it with its terrific and splendid objects. A deep contracted ravine leads from the valley of Castleton to its entrance. On each side of this gloomy chasm rise stupendous masses of rock: that on the left sustains on the very ledge of its summit an ancient castle, while at its feet appears the stream that gushes from the cavern on the right; a stream "which (says Mr. H. Moore) after heavy rain, is seen to boil up from underneath the rock, at the entrance of the cave, dashing over the fragments of limestone that lie in its channel."§

Peak Hole, or Cavern.

The mouth of this cavern is vast and magnificent. It consists of a broad,

* Bakewell's Introduction to Geology, Chap. VII.
† Idem.
‡ Pilkington's Derbyshire, Vol. I. page 62.
§ Moore's picturesque Excursion.

CHAP. 1. Peak Hole, or Cavern.

unsupported arch, one hundred and twenty feet wide, and fourteen feet high. This arch is flattened, but yet tolerably regular; and the receding depth, where the light of day becomes gradually obscured until it dies away in the internal darkness, is differently calculated, but by Mr. Pilkington is estimated to have an extension of about a hundred yards.* Within this porch, there is a twine-manufactory: many persons are there employed; and men, women and children, are seen busily moving about in this dismal expanse.† Proceeding onwards beyond the rude habitations and humble machinery of these curious groups, the roof descends, and, at the base of an isolated rock, in the depth of darkness, the visitors are conducted to the interior entrance of the cavern. Torches or candles are here supplied, and the guide unlocks the gate, which, unlike the portal of Dante's subterranean abode, has no inscription forbidding the visitants the indulgence of hope, but, on the contrary, is never entered without much expectation, which is, happily, never disappointed. Within the gate the passage becomes low and confined. The visitors are obliged to stoop for many yards, and a spacious vault, called the *Bell-house*, at length receives them. The sides of this vault appear to close down upon the stream of water, which spreads out beneath them into the form of a small lake. This pool or lake is denominated the *first water:* its depth is not more than two or three feet, and its extent is about fourteen. The opening in the incumbent rock is just sufficient to admit a small boat, in which the passengers lie as they would in a bed, while the guide walks in the water and thrusts the boat across the stream. In awaiting this embarkation the mind has an opportunity for classic and poetic indulgences. The gleam from the torches, and the reflection of moving and glittering images from the water, set before the imagination troops of shadowy beings, that seem suddenly to start from their abysses upon the intruders.

After a short voyage across this lake, between the superincumbent rock and the water, an ample cavernous expanse is entered. This is called *the saloon*, and is said to be two hundred feet wide, and, in some parts, one hundred and twenty feet in height. No ray of light can enter this cavern except what may proceed from the candles of the visitors, and these faint glimmerings only serve to render the extreme darkness of the place the more impressive. On the farther side of this cavity the cavern stream spreads out again into what is termed the *second water*, which can be generally passed without the aid of the guide. The visitors then find themselves within an inclosure of broken and projecting rocks, through which water perpetually percolates in a drizzling shower. This rocky inclosure is called *Roger Rain's House*, and it expands gradually into a vast and

* Pilkington's Derbyshire, Vol. I. page 63.

† The author of the following lines seems to have wilfully mistaken the character of this manufactory, and to have substituted hempen ropes for hempen twine.

" —— a crew o'th' Fates' pale labourers, who
Their direful tasks in this dread porch pursue.
Not threads of life they shorten or extend,
But hempen cords of death—the murd'rer's end!
The eager Furies urge the toiling bands,
And Rhadamanthus roars forth his commands.
Thomas's Philanthron.

awful cavity, which bears the name of *the Chancel.* Here is sometimes placed, in order to surprise the visitors, a choir of the High Peak singers, consisting generally of men, women, and children, under the direction of the parish clerk of Castleton. The sharp and nasal tones of these choristers are not always in unison with each other, but they are far from being out of tune with what may be supposed the ideas of visitors in "these lower regions, where darkness holds an everlasting reign."* Many visitors will at that moment have in their recollection, the passage in Virgil's sixth Book of the Æneid.

> "Continuò auditæ voces, vagitus et ingens,
> Infantumque animæ flentes in limine primo.
> * * * * * * * * * * * *
> Hos juxta, falso damnati crimine mortis."
>
> Here infants' spirits, that in birth expire
> Are ever heard—a shrill and sad-toned choir—
> And, near them, those who falsely sentenced die,
> Groan for their adverse fate perpetually.

These singers, however, disappoint, very happily, our Virgilian impressions. They do not cry or groan continually. Mr. Moore correctly observes, that, "after a stave or two, these vocal performers produce a number of lighted candles, when we behold them on a rocky gallery at a great height. These lights show the rude arches and vastness of this subterranean cathedral with fine effect; yet much Tartarian obscurity remains, wherein the imagination wanders with awe."† Music, in such a situation, however rude and discordant, is capable of producing an awful effect; and we cannot but fully agree with Mr. Warner, who observes, that these unexpected strains "issuing from a quarter where no object can be seen, in a place where all is still as death, and every thing around calculated to awaken attention, and powerfully impress the imagination with solemn ideas, can seldom be heard without that mingled emotion of fear and pleasure, astonishment and delight, which is one of the most interesting feelings of the mind."‡

The path from the *Chancel* descends through an extent of about one hundred and fifty feet, to the *Half-way-House,* where a deep rumbling of the water is heard, and the visitors, stooping continually beneath the impending rocks, are obliged twice to cross the stream. *The Devil's Hall, Gloucester Hall,* and the *Great Tom of Lincoln,* are cavernous chambers of considerable interest, particularly the last, which has a large cavity in its roof, resembling the form of a bell. This, when strongly illuminated, exhibits such harmonising proportions in the projecting rocks, the stream beneath, and the spiracles in the roof, that the whole strikes the mind as the bold yet regular design of a daring yet skillful architect.

A little beyond this spot the roof of the cavern closes down upon the

* Moore's Picturesque Excursion.
† Idem.
‡ Warner's Northern Tour.

CHAP. 1. Peak Hole, or Cavern.

verge of the water, and further progress is precluded. Attempts have been made to open a passage to other caverns, but without success. The ingulfment of the stream which flows through these subterranean chambers, is about four miles from the Manchester road, at a place called Perry-foot.* This has been proved by chaff or slips of paper, which being thrown into the water there, frequently find their way to the cavern.

Before the visitor quits the cavern, his attention is usually called to the effect of a blast; which is an explosion of gunpowder, wedged into the rock in the inner part of the cave. The sound reverberates, in repeated peals, with a dreadful volume of intonation. The return to the light of day, from the recesses of the cavern, is, by all who have experienced the emotion it produces, pronounced to be delightful. "The gradual illumination of the rocks," says the writer in the Beauties of England and Wales, "which become brighter as they approach the entrance, and the chastened blaze of day, that arrays the distance in morning serenity, is, perhaps, one of the most beautiful scenes that the pencil could be employed to exhibit."

The whole extent, from the mouth of the cavern to the farthest part of these subterranean chambers, hitherto penetrated, is about 2300 feet; and, it is worthy of remark, that an intelligent foreigner, in his Journal, has declared himself to have been struck "on approaching Peak's Hole with its strong resemblance to the rock of the *Fontaine de Vaucluse*."

Poole's Hole.

Poole's Hole is a cavern in the mass of limestone that ranges westward of Buxton. An ancient tradition declares it to have derived its name from an outlaw, named Poole, who made it his residence. The entrance is as mean and contracted, as that of the Peak cavern is awful and magnificent. Through a crevice, very low and confined, the curious visitant can proceed only in a stooping posture, to a lofty and spacious chamber, "from the roof and sides of which depend a quantity of *stactalite*, produced by droppings of water laden with calcareous matter. Part of this substance adheres to the roof, and forms gradually masses called *stalactites*, or (locally) *water-icicles*: another portion drops with the water to the ground, and attaching itself to the floor, is there deposited, and becomes the *stalagmite*, a lumpy mass of the same matter."† These bodies are daily increasing, and it is curious to observe their diversity of figure, which by the aid of fancy may be thought closely to resemble the works of nature or of art. "In one place," says Mr. Rhodes, in his Peak Scenery, "we were shown a *petrified turtle*; in another, a *flitch of bacon*; in a third, *old Poole's saddle*; and still further on there are other calcareous incrustations, called *wool packs*, a *chair*, a *font*, a *pillion*, and the pillar of Mary *Queen of Scots*. That these names have been dealt out and appropriated in a very arbitrary manner, may easily be imagined. The whale, or ouzel, which Hamlet points out among the clouds to poor Polonius, was not more unlike in form and feature than these uncouth resemblances are to the objects they are said to represent." The mass called the *Flitch of Bacon* occurs

* *Perry-foot* is, according to Farey, only one of the ingulfments in the great limestone fault, the waters of which supply "the immense spring called Rushop or Russet, before the entrance of Peak's Hole Cavern, in Castleton town, and a large torrent of thick water besides, which, after heavy rain, bursts out of this cavern." Farey, Vol. I.

† Warner's Northern Tour.

about the middle of the cavern, which there contracts its dimensions for a short space, and then spreads out both in height and width as far as the astonishing mass of stalactite, denominated the *Queen of Scots'* pillar, from a tradition that the unfortunate *Mary* visited this cavern while she resided at Buxton, and penetrated thus far into its recesses. The remaining portion of this subterranean cavity contains few objects to compensate the labour and danger of exploring it. Mr. H. Moore was told by his guide, an aged woman, that no persons had been to the termination of the cave for many years. He therefore proceeded without the protection of his reverend directress, or due regard to her Cumæan admonitions. From the pillar he descended over disjointed rocks, and scrambled over the disordered masses of slippery craggs. His intrepidity was rewarded by the discovery of the names of several who had been there before him. Thus, having satisfied his curiosity, he began to return.— CHAP. 1. Poole's Hole.

> "Sed revocare gradum, superasque evadere ad auras,
> Hoc opus, hic labor est."

He found no passage in the direction which he expected would conduct him back: he tried another part, but without success: he then made a third effort, but still no road could he find: in several other attempts he was equally unsuccessful, and in the midst of these difficulties a drop of water from the roof struck the flame of his candle, and it nearly expired. Fortunately, his attendant Sybil was not altogether unmindful of his dangerous situation, when one false step amid the rude masses of broken rocks might have been fatal. She at once raised both her voice and her candle: the light flashed through the small opening by which he had entered, and passing, by her directions, through a narrow fissure, called the *Eye of St. Anthony's Needle,* he effected his return in safety.——The path by which visitors are conducted back to the entrance of the cavern, passes underneath a considerable portion of that by which they are at first conducted. In this passage there is a fine spring of water. The stalactites are here numerous, and appellations have been bestowed upon them, which if they ever had any appropriate conformity with their shapes, cannot long retain that conformity, since those shapes must be continually varying in form from the depositions left by the water, which constantly percolates through the roof and sides of the rock. The character of this cavern is very different from that of the Peak at Castleton. Its dimensions are variously stated; Pilkington says, the whole length is 560 yards; 460 to the Queen of Scots' Pillar, and 100 beyond it. Mr. Moore gives 2007 feet as the extent from the entrance to the extremity, while the writer in the Beauties of England and Wales, asserts that the extent of the cavern does not exceed 300 yards.

A perpendicular chasm in the fourth lime-stone stratum, connected below with extensive lateral cavities, is one of the reputed wonders of the Peak. It is situated on the side of a hill about three miles from Castleton, and is called *Elden Hole.* So attached to the wonderful are many persons, who travel, not so much to admire and investigate natural objects, as to indulge their love of astonishment, that even in the nineteenth century there are some who very reluctantly relinquish their belief in the very extravagant narratives that have been related concerning this cavern. The Elden Hole.

CHAP. 1. Elden Hole.

unfathomable depth of caves, seas, and fens, has always been a favourite topic with the credulous and the ignorant: and this immense fissure was long thought to be bottomless. The philosopher Hobbes says, of an enormous piece of rock which he and his companions rolled to the mouth of the cavern, and then thrust it into the aperture:

> Utima tum subiens, infandaque Tartara, centrum
> Transit.
>
> The lowest deep descending, it broke through
> Hell and the center.

During the reign of Elizabeth, a poor man was hired by the famous Dudley, Earl of Leicester, to suffer himself to be let down by a rope into this cavern, and the event forms an amusing episode in Hobbes's Latin Poem, *De Mirabilibus Pecci*, which we shall give in the words of a translation made by a contemporary of the author.

> " 'Tis said great Dudley to this cave came down,
> In great Eliza's reign a peer well known.
> He a poor peasant for a petty price
> With rope around his middle does entice,
> And pole in hand, like her, Sarissa* hight,
> And basket full of stones down to be let
> And pendulous to hang i' th' midst o' th' cave;
> Thence casting stones, intelligence to have,
> By list'ning, of the depth of this vast hole.
> The trembling wretch descending, with his pole
> Puts back the rocks, that else might on him rowl.
> By their rebounds, casts up a space immense,
> Where every stroke does death to him dispense;
> Fearing the thread, on which his life depends,
> Some rogue might cut ere fate should give commands.
> Then, when *two hundred ells* he had below
> I' th' earth been merged far as the rope would go,
> And long hung up by it within the cave,
> To th' earl—who now impatient was to have
> His answer—he's drawn up; but, whether fear
> Immoderate distracted him, or 'twere
> From the swift motion as the rope might wreathe,
> Or *spectrums* from his dread, or hell beneath,
> Frighted the wretch, or the soul's citadel
> Were stormed or taken by the imps of hell,
> For certain 'twas he rav'd;—this his wild eyes,
> His paleness, trembling, all things verifies.
> While venting something none could understand,
> Enthusiastic hints ne'er to be scann'd,
> He ceased, and died, after eight days were gone.
> But th' earl informed, how far the cave went down,
> Tremblingly from it hastes—not willing now,
> Nor yet this way, down to the shades to go."†

But these two hundred ells are little to the calculation of the facetious poet, Charles Cotton, who gives the following account of his unsuccessful attempt to fathom this fearful pit.

> " But I myself, with half the Peake surrounded,
> *Eight hundred, four score and four yards* have sounded;

* Sarissa of Pella, vide Josephus.

† *De Mirabilibus Pecci*, translated by a person of quality, 1678.—8vo.

And though of these fourscore returned back wet,
The plummet drew, and found no bottom yet;
Though when I went to make a new essay,
I could not get the lead down half the way."*

This statement of Cotton's, while it proves his anxiety to be accurate, leaves the matter in uncertainty; but the lover of wonder seizes upon the more astonishing portion of this experiment, and Dr. Charles Leigh, who wrote in 1700, says, "Elden Hole is a terrible chasme, it was plummed eight hundred fathom by the ingenious Charles Cotton, esq. but no bottom was found;"†—thus nearly doubling the first part of the essay, by converting Cotton's *yards* into *fathoms*, and omitting any mention of the fact, that on the second attempt, Cotton himself acknowledges that he "could not get the lead down half the way." It is thus that an attachment to the miraculous misleads mankind, not only in physics, but frequently in much more important concerns. Correctness in geological investigations is not to be expected from the followers of the muses, but there is something ingenuous as well as ingenious in Cotton's lines that entitle them to respect, and it is not impossible but that, by the divergency of the plummet from its perpendicular descent, as well as from the probable subsequent falling in of a portion of the rock across the cavity, his statements may have been perfectly correct. The measurement made by the person quoted by Catcott, in the Treatise on the Deluge, inserted in the second number of the Philosophical Transactions, is still more extraordinary. He declares that he let down a line, *nine hundred and ninety-three yards*, without meeting a bottom. It would however be more absurd to refuse, absolutely, any belief in this statement, than to suppose that changes may have taken place in the floors of these cavernous depths.

In the year 1770, Mr. John Lloyd, F. R. S. an intrepid enquirer into the secrets of nature, descended into this chasm, and published an account of his enterprise in the sixty-first volume of the Philosophical Transactions. "He was let down by two ropes about forty fathoms long: for the first twenty yards, though he descended obliquely, he could assist himself with his hands and his feet; but below this, the rock projecting in large irregular crags, he found it very difficult to pass; and on descending ten yards more, he perceived that the rope by which he was suspended, was at least six yards from the perpendicular, from hence, the breadth of the chink was about three yards, and the length about six; the sides were very irregular, and the crags were covered with moss, being besides wet and dirty; within fourteen yards of the bottom, the rock opened on the east side, and he swung till he reached the floor of the cavern, which was at the depth of sixty-two yards from the mouth of the chasm; the light, however, which came from above, was sufficient for the reading of any print. Here he found the cavern to consist of two parts; that in which he alighted, was like an oven, the other, where he first began to swing, was a vast dome, shaped like the inside of a glass-house, and a small arched passage formed a communication between them; in this passage, the stones which had

* Wonders of the Peake, 1681.
† Leigh's Natural History of Lancashire, Cheshire, and the Peak in Derbyshire. Oxon. 1700.—fol.

CHAP. 1. Elden Hole.

been thrown in at the top formed a slope, extending from the wall, at the west side of the first dome, almost to the bottom of the second cave or oven, so that the further end of the cave was lower by twenty-five yards than where he alighted. The diameter of this cavern he judged to be about fifty yards; the top he could not trace with his eye, but, had reason to believe, that it extended to a prodigious height; for, when he was nearly at the top of one of the incrusted rocks, which was an elevation of at least twenty yards, he could then see no inclosure of the dome.

"After climbing up a few loose stones, on the south side of the second cavern, he descended again through a small aperture into a little cave about four yards long, and two yards high, which was lined throughout with a kind of sparkling stalactites of a fine deep yellow colour, with some small stalactical drops hanging from the roof. He found a noble room of about ninety feet in height, of the same kind of incrustation, facing the first entrance; as he proceeded to the north, he came to a large stone, that was covered with the same substance, and under it he found a hole two yards deep, that was uniformly lined with it. From the edge of this hole sprung a rocky ascent, sloping like a buttress against the side of the cavern, and consisting of vast, solid, round masses, of the same substance and colour; he climbed up this ascent to the height of about sixty feet, and got some fine pieces of stalactites, which hung from the craggy sides of the cavern, that joined the projection he had ascended. He now descended with some difficulty and danger, and soon came to another kind of incrustations, of a different kind and colour; these being much rougher, and not tinged with yellow, but brown. At the top of this he found a small cavern, opening into the side of the vault, wherein he saw vast drops of stalactites, hanging like icicles from every part of the roof, some of which were four or five feet long, and as thick as a man's body. The greater part of the walls of the large cavern was lined with incrustations of three kinds; the first was the deep yellow stalactites, the second was a thin coating, resembling a light-coloured varnish, this covered the limestone and reflected the light of the candles with great splendour; the third was a rough efflorescence, every shoot of which resembled a kind of rose-flower.

"He now returned through the arch, which separates the two vaults, re-ascending the slope of loose stones, which greatly lessened the magnificence of the entrance into the inner cavern. When he had again fastened the rope to his body, he gave the signal to be drawn up, which he found much more dangerous and difficult than being let down, on account of his weight drawing the rope between the fragments of the rocks, to which he adhered, and his body jarring against the sides, notwithstanding the defence he made with his hands: the rope also loosened the stones over his head, the fall of which he dreaded every moment, and if any of them had fallen, he must inevitably have perished. Being obliged to ascend with his face towards the rock on one side, he could not make any particular observations on the rocks that were behind, or on each side of him; he saw, however, under the projection of the rock where the passage first became narrow, the entrance of a cavern which seemed to penetrate a great way, but he could not get into it. A gentleman who lived near the spot, told Mr. Lloyd, after his return from this subterranean expedition, that there

was formerly, in the floor of the great cavern, near to the large heap of stones, a second shaft, which had been covered by the miners, and was said to have gone down a vast depth, and to have had water at the bottom,—this was probably the direction that the plummet took which was let down by Mr. Cotton." This covering (says Mr. H. Moore) has now probably fallen in, for a large stone being thrown down the abyss, is heard for a length of time, that indicates a far greater depth than that which is mentioned by Mr. Lloyd; we see it bounding from rock to rock, and breaking into many pieces: by listening attentively, we hear those pieces strike the sides, with fainter and fainter sounds, until they gradually die away; so that we perceive no conclusion that can enable us to say—it has reached the bottom.

The writer in the Beauties of England and Wales states, that the depth was ascertained, in his presence, by a plumbing line, to be *sixty-seven yards and one foot*. This was corroborated by the assertions of three miners, who descended into this cavern in 1767. The occasion of their undertaking (according to the Rev. D. P. Davies) was the "discovery of two horses of a gentleman and lady without their riders, near the abyss. The country people imagined (and perhaps with reason) that the latter had been robbed, murdered, and thrown into Elden Hole; and let down some miners into it, in order to search for the bodies, but nothing was discovered to justify the report of the murder. About the year 1800, a similar circumstance of a man's horse, without its master, being discovered near Elden Hole, induced a body of miners to undertake a like expedition, but with as little success as their predecessors, and without making any additional discoveries. It is said, that some years ago, a cruel wretch confessed at the gallows, that he had robbed a traveller, and afterwards thrown him into this cavern."*

Amongst the miners of the Peak, an opinion had long prevailed that all the high ground between Perry-foot and Castleton would be found to abound with clefts and caverns; and Pilkington remarks,† that this opinion was verified by the discovery of a long series of cavernous chambers between Elden Hole and the Peak Cavern. These subterraneous cavities branch off, probably, in various directions from a main passage; and with these is undoubtedly connected the suite of beautiful caves at Bradwell, called the Bagshaw or Crystalized Caverns, which were first explored about the commencement of the present century.

Bagshaw, or Crystalized Caverns.

There is nothing about the entrance of these brilliant cavities indicative of the wonders below. A hundred and twenty-six perpendicular and irregular steps conduct the visitor to a natural rotunda, with a small opening in the roof, through which the miners first descended by means of a chain. The passage thence is low and difficult, but the fatigue is amply repaid by the grottoes, abundant in crystalizations, which open along the path. At the termination of a sloping and rugged declivity, a cavern called the Grotto of Paradise, presents itself. It is about twelve feet high, and twenty feet long, and the arches of the roof are pointed like those of a gothic hall. From those arches, a countless number of stalactites are pendant, and the

* New Historical and Descriptive View of Derbyshire, by Rev. D. P. Davies.

† Pilkington's present state of Derbyshire, Vol. I. page 72.

CHAP. 1. Bagshaw, or Crystalized Caverns.

sides are richly incrusted. When lights are placed among these crystalizations, the illumination is brilliant in the extreme. The floor is chequered with black and white spar, and has altogether the appearance of a work of consummate art.—"Still continuing a similar road," says Mr. Hutchinson, in his Tour,* "and entertained at various times with the curiosities of the place, and the gentle patterings of the water, which scarcely break the solemn silence of the scene, at length you arrive at the Grotto of Calypso, and the extremity of the cavern, about 2000 feet from the first entrance. In order to see this to advantage, it is necessary to rise into a recess, about two yards high. There, indeed, from the beautiful appearances of the different crystalizations, some of them of an azure cast, and from the echoes reverberating from side to side, you fancy yourself to be arrived at the secluded retreat of some fabled deity. The water also running near this cavern, brings a cool refreshing air, which from the exertion used, and the closeness of the place, is very acceptable. The size of this grotto is something similar to that of the last, and, indeed, it is difficult to determine, which is the most interesting."—There are other grottoes, more or less elegant and spacious, connected with these, which have received names expressive of their peculiar characteristic appearances, as the Constellation, the Hall of State, &c. In all these, there are varieties of form, size, and colour, in the stalactites, worthy the attention of the mineralogist. "It appears certain that the small or tubular has no additional circumference, for the water, from which they are formed, does not act on their superficies, but descends from the roof through their very fine tubes, and hence they increase in *length only*. It also appears equally clear from these tubes, into which the air cannot penetrate, that, notwithstanding the crystalizing quality of the waters, yet in the exclusion of the air it can have no operation."†—This series of elegant grottoes is the property of Sir William Bagshaw, whose lady was among the first of those who ventured to explore them, and who, on that occasion, bestowed upon them the names by which they are distinguished.

Were it possible to describe the interior characters of all the cavernous chambers, formed either by the disruptions or by the *shrinking*‡ of the fourth limestone stratum, the detail would become tedious, and add little to the knowledge obtained by an examination of those already mentioned. The great rent in the strata of Derbyshire, hereafter to be described, by which so much of the subterranean geography of the county is rendered apparent, first distinctly manifests itself in the neighbourhood of Matlock, and there some caverns have been discovered within the last thirty or forty years, and opened for the inspection of the curious, which must not be passed over without notice. We borrow the following neat and succinct account from the comprehensive guide-book of the Rev. R. Ward,§ who, speaking of these attractions of that admirable place, says, "these consist of three caverns, the Rutland, the Cumberland, and the Fluor,‖ which

Caverns at Matlock.

* Hutchinson's High Peak.

† Bradwell's Description.

‡ Farey, Vol. I. page 292.

§ Matlock, Buxton, and Castleton Guide, &c. by Rev. R. Ward, page 37.

‖ The Devonshire cavern, and another of similar description with the rest, have been added to the curiosities of Matlock.

though similar in some respects, yet differ so much in others, as to induce some persons to visit them all." CHAP. I.

" Facies non omnibus una
Nec diversa tamen, qualem decet esse sororum."*
Ovid, M. lib. XI. v. 13.

Rutland Cavern.

" The Rutland cavern, in the Heights of Abraham, is remarkably easy of access: the first part of it is a long level path, formed with great labour by miners in the solid limestone, and leading to several very lofty cavities and vaults of great extent, ramifying, as it were, and spreading in different directions. At the side of one of these an easy ascent, by a great number of steps, conducts the visitor to numerous other cavities and vaulted passages amidst rocks of the most grotesque forms and craggy appearance, extending far into the inner part of the mountain. This cavern contains some springs of clear water, and is adorned with various brilliant crystalizations, and different metallic ores, which are here commodiously presented to the view in their native state:

' Here ranging through her vaulted ways,
On Nature's alchymy you gaze,
See how she forms the gem, the ore,
And all her magazines explore."

" The view of the heights of the romantic dale below, which appears very striking at all times, is peculiarly so to the spectator, when, having traversed this extensive cavern, he first emerges from the dark recesses of it.

Cumberland Cavern.

" The Cumberland is a single cavern formed by the union of two, which have been visited as objects of curiosity almost thirty years. This is shown by Mr. Peter Smedley, who keeps a spar-shop opposite Walker's lodging-house, and is situated at a considerable distance up the hill behind that and the New Bath. It extends to a very great length, and possesses this advantage, that the visitor is not obliged to retrace his steps to the part where he entered, but finds an exit at the other end of it. The roofs of the numerous cavities within it are of a different kind from those in the Rutland cavern, having less the appearance of arches; and the multitude of massy stones, lying within them, appear to have fallen from the roofs above, through some violent concussion of the earth, by which they have been disjointed and thrown into horrid confusion. Several parts of this cavern have a very brilliant appearance, and exhibit different substances, which will be inspected by the curious mineralogist with great interest and satisfaction.

Fluor Cavern.

" The Fluor cavern is situated towards the top of the wood behind the Old Bath, and though much less extensive than either of those just mentioned, it will not, on that account, by many persons who are inclined to visit caverns, be thought undeserving of particular notice. The way up the wood has been improved, and the trouble of ascending it is compensated by the view of the scenery it exhibits: the passage into the cavern

* These not alike, nor yet unlike we deem,
But such as lovely sisters might beseem.

CHAP. 1. Fluor Cavern.

is rendered commodious, and the *souterrain* visit easy and agreeable. The different spars in this, as well as in the other caverns, are brilliant and interesting; the strangely grotesque forms of the objects it contains, highly amusing; and the numerous lights placed in its various recesses, produce a very impressive and pleasing effect."

Another branch of the great rent through the stratification of the county, which exposes the cavities of the lowest limestone yet discovered in this island, extends across the vale of the Dove. There, "in a vast mural mass of detached rock, which extends along the edge of a precipice on the right, nearly half way up the side of the dale, is a magnificent natural arch, called Reynard's Hall. Its shape nearly approaches to the sharply-pointed gothic:* its height is about forty feet, and its width eighteen. Through this, in the body of the rock, the eye distinguishes the mouth of a cavern, which, from the situation so immediately above the opening of the arch, excites an idea that the latter has been formed by some tremendous burst of water, discharged through that aperture, from the interior of the mountain. On scrambling beneath the arch, however, up the steep path to the cavern itself, this idea is not strengthened, for the extent of the excavation is little more than forty feet; its height is about fifteen. The fatigue of ascending is repaid by the view from the entrance, which, though confined, is extremely beautiful. The opposite side of the dale is covered with a mass of hanging wood, from the midst of which a large detached rock, solitary, craggy and pointed, starts out to a great height, and forms a very grand object.—This cavern is called Reynard's Hall; and another small opening in the rock below it, on the right, has been named Reynard's Kitchen. Near this extremity of the dale is another large cavern, called Fox-holes; and others of inferior note may be found in different parts of this interesting chasm."†

A list of remarkable Natural CAVERNS *and* HOLES *in the* ROCKS, *in and near to Derbyshire.*

Bagshaw's Cavern (or the Crystalized Cavern) in Mule-spinner mine, SW of Bradwell, 400 yards long, in 3rd lime.
Bamford hole, a Cavern in Middleton dale, near Eyam, in 1st lime (Pilkington, I. 78.)
Bondog-hole mine Cavern, in Middleton by Wirksworth, in 4th lime, stalactites.
Bull pit, E of Perry-Foot, in Peak forest, a deep open hole, in 4th lime.
Callenge Low, SE of the farm-house, near Monyash, deep open holes, in 1st lime.
Charleswark Cavern, in Middleton dale, near Eyam, in 1st lime (Pilk. I. 78.)
Chelmorton Cavern, in Marl-dale, W of Chelmorton, in 4th lime (Pilk. I. 76.)
Creswell Crags, E of Elmton, adjoining Notts. small caverns in yellow lime.
Crosslow mine Cavern, in Foolow, near Eyam, in 1st lime: ore was dressed in this cavern, instead of being drawn to the hillock.
Cumberland and Rutland Caverns at Matlock Bath, in 2nd lime, 3 clay wayboards in it (Pilk. I. 161.)
Devil's Hall, in Fore-side mine, at Castleton, in 4th lime: connected by a tunnel with Speedwell mine.
Dove-hole Cave, in Dove-dale, near Hansongrange, in 4th lime.
Dove Pit, at Dowall, in Hartington, a very deep open hole, in 4th lime.

* "Here entering, I refreshed myself within
With rest and food, and, more desired than all,
With Dove's pure lymph. It was no sumptuous inn—
No 'haven' on the moors, this gloomy hall,—
Which yet pleased me; for here I might recall
Judean scenes; the sheep-cotes and strong hold
Where David nobly spared the life of Saul,
This cave, yon shepherd's abbey with its fold,
Brought, like a sacred vision of the days of old. *Edwards's Tour of the Dove.*

† Beauties of England and Wales.

Drake Mine Cavern, in Winster, in 1st lime.
Duss Pit, in Eyam, an open hole, in 1st lime.
Elden Hole, N of Peak forest town, a very deep open hole, in 4th lime, connecting with vast lateral caverns below. John Lloyd, esq. of Wigfair, in North Wales, descended into this hole, and has fully described it, in the 61st vol. of the Phil. Trans.
Godfrey Hole, E of Hopton, a small cavern, in 4th lime detached.
Golconda, a very large cavern, in Griffe, near Hopton, in 4th lime.
Harboro-Hall, in the rocks NE of Brassington, 2 small caverns, the upper one enlarged by art, in dunstone or 3rd toadstone.
Knowle's Mine Caverns, on Masson Hill, in Matlock, in 2nd lime.
Merlin's Cave, S of Eyam church, in 1st lime, beautiful stalactites well preserved, by the care of the late William Longsdon, esq. the owner.
Orchard Mine Caverns, in Wirksworth, in 1st lime.
Peak's-Hole, at SW corner of Castleton town, in 4th lime, the wide entrance having a concreted breccia or rider-like roof. An immense stream of water vents here in rainy seasons.
Placket Mine Cavern, in Winster, in 1st lime, 120 yards high!
Pool's Hole, ½ m. S SW of Buxton, a long cavern, in 4th lime (Pilk. I. 67) a large stream of water vents here in very rainy seasons.
Ranter Mine Cavern, in Wirksworth, in 1st lime.
Reynard's Hall and Cave, caverns, with a natural arch before the hall, in Dove-dale, near Hanson-grange, in dead veins in 4th lime.
Thor's House, or Thyrsis's Cavern, in Wetton dale, W SW of the town, in Staffordshire, in 4th lime, a fine natural arch.

A number of Shake-holes, less remarkable for their size or appearance than the above, and often occurring near to the principal Faults, are called Swallow-holes, from their swallowing or absorbing small rills, and even large streams of water, in some instances; this following, is

A list of WATER-SWALLOWS, *or* HOLES *in the* ROCKS, *into which streams of water fall and disappear, in and near Derbyshire.*

Aldwark, NW (Ducket-Wall) near Brassington, the water is collected on and falls from 3rd toadstone into the 4th lime.
Alsop, one third m. SE from shale, into 4th lime, near the great limestone fault.
Ashover, at the E end of the town, two large sunk and open holes, in 1st lime, from shale, into the northernmost of them.
Blackwell-Ditch, near Taddington, from alluvia, into 3rd lime.
Chelmorton, at S end of the town, from 3rd toadstone, into 4th lime.
Dale Head, W NW of Tideswell, from 3rd toadstone, into 4th lime.
Dove Hole, E of Peak forest, from shale into 4th lime, on great L. F.
Dowall, NW, in Hartington, from sunk piece of shale, into 4th lime, at its boundary fault.
Foolow, in Eyam (water-fall) a large open hole in 1st lime, from shale, at a fault: a waterfall.
Grindlow, near Eyam (Dowse-hole) a deep open hole, in 1st lime, from shale.
Grindon, near Buxton (W of Counters' Cliff) from shale, into 4th lime, near great L. F.
Hazlebadge, near Great Hucklow (S of Houses, and Pippin's hole) from shale, into 3rd lime, at great L. F.
Hopton E, from shale, into 4th lime, near great L. F.
Monyash E (in Ricklow dale) in 1st lime.
Mouldridge Grange, ½ m. N of Pike hall, from 3rd toadstone, into 4th lime.
Parwich, one third m. W, from shale, into 4th lime, near great L. F.
Peak Forest, S (Dam-dale) from 3rd toadstone, into 4th lime.
Perry-Foot, N of Peak forest, a large open hole, in 4th lime, a considerable stream from the shale, on great L. F.
Rushop Edge, N of Peak forest, 8 or 9 holes, in 4th lime, much water at times from shale, at great L. F.
Tideswell, S of the town, from 2nd toadstone, into 3rd lime.
Tunstead W and S, near Wormhill, from 3rd toadstone, into 4th lime.
Water-Houses, in Staffordshire, Hamps river, from shale into 4th lime, at great L. F.
Water-Swallows, in Fairfield, E, from 3rd toadstone, into 4th lime.
Wetton, W NW, in Staffordshire (Darfa) Manifold river, from shale limestone, into 4th lime, at great L. F.

Springs of water are numerous in Derbyshire, and many of them are justly celebrated for their medicinal qualities. The origin of springs has been the subject of much discussion amongst theorists, but practical men, such as civil-engineers and miners, generally are of opinion, that springs are occasioned by the filtration of rain-water through porous strata, which continues descending until it meets with a stratum of a more compact and impervious nature. The rents that intersect the limestone, sometimes afford passages for the water, and sometimes it is found expanded through beds of gravel, clay, or other soils. Some springs are remarkable for their abundant and constant streams of pure water, while others are variable, intermittent, or turbid. Some occur in high and rocky districts, where their supply of water is often small, while others having first percolated in large quantities through higher grounds, rise with velocity in artificial wells

Springs.

CHAP. 1. Springs.

or borings and overflow the surface. Of the medicinal virtues of some springs, of their mineral impregnations, and of the warm and hot waters emitted by a few, we shall endeavour to give our readers some information, after having first transcribed the following list from the work of Mr. Farey.

The following is an alphabetical list of the notable SPRINGS *of* WATER *in Derbyshire, viz.*

Aldwark W (Ducket-wall) on 3rd toadstone.
Allestree Town, on the great Derbyshire fault.
Alport, near Yolgrave, petrifying formerly, at the great Bakewell fault.
Alton SE, in Ashover, ochrey and corrosive, in 3rd coal-shale.
Ashover, chalybeate, from shale; SW (Lexley) dried up.
Bakewell Town (at W. Watson's) warm chalybeate, a bath formerly.
Ballidon SE (Hipple) large, temporary, in 4th lime, near the great limestone fault.
Barmoor NW, in Peak forest, intermitting.
Berley in Eckington (Spa) chalybeate, an open bath formerly; E (Moor-sough) ochrey and corrosive.
Bradley S, chalybeate, near the great Derbyshire fault.
Bradwell S (Well-head) large, out of moss rake; N (Edingtree) warm, salt; and E, sulphureous, on shale.
Brassington (Thacker-well) sulphureous; and NE (Harboro-well) on 3rd toadstone.
Bredsall SW, ochrey, near the great Derbyshire fault.
Bretby S SW (decoy wood) petrifying, from yellow lime.
Brough, near Hope, warm chalybeate, in shale.
Buxton Town, hot, 82 degrees, and baths; chalybeate, 52 degrees to 55 degrees, in shale, these on opposite sides of the great limestone fault, W of Buxton, cold, and a bath; and (Wye-head) on fault.
Castleton, chalybeate; and SW (Rushop or Russet) very large, at the great limestone fault.
Chelmorton NE (Five-wells) on 2nd toadstone.
Chesterfield Town E, chalybeate, 10th grit rock.
Cowley, SW of Dronfield, sulphureous, an open bath.
Crich W, by a fault.
Cromford Town (Sough) large, warm, from gang and bage mines, &c.
Crowdycote in Hartington (Crowdwell) large, near the great limestone fault.
Derby, in St. Alkmund, Allsaints, St. Michael, and St. Peter, overflowing wells, in red marl.
Donisthorpe, ½m. W, in Measham, a salt spring in the coal-pit, near the red marl.
Dove Dale, N of Lover's Leap, near Hanson-Grange, large, in 4th lime.
Duffield (Fishpool-flat) 2 chalybeate.
Eccles in Chapel-en-le-Frith (Mr. Goodman's) artificial ebbing and flowing well.
Ecclestor (or Eaglestor) in Yolgrave, chalybeate, in shale.
Edale Chapel SW (Barber booth) ochrey, in shale.
Flagg Town, near Monyash (Wells) on 2nd toadstone.
Grange-mill N, near Winster (Shothouse) on 2nd toadstone.
Hargate-wall E, in Wormhill, and ¾ m. NW, on 2nd toadstone.
Hartington NW, on Castern Low (Well) on 4th lime wayboard.
Heage W (Nether-end) chalybeate, in 3rd coal-shale.
Hope, chalybeate, in limestone shale.
Hurdlow SW, in Hartington, on 3rd toadstone.
Ilam S, Staffordshire (Manifold) in the garden; and SW (Hamps) very large, in 4th lime, near great limestone fault.
Kedleston Park, SE of the house, sulphureous, salt, 47 degrees (Pilk. vol. I. p. 272) a bath, in red marl.
Kinder E, in Glossop, ochrey, in shale.
Kniveton S (Agnes and Mudge) sulphureous, in shale limestone.
Little Longsdon W (Monsal-dale) petrifying.
Litton SW, on 2nd toadstone; and SE (Cressbrook-dale) petrifying.
Loads W, in Chesterfield (Sida) pretended fattening, &c.
Ludwell S and N, in Hartington, very large, in 4th lime; near the great limestone fault.
Matlock, chalybeate, in shale.
Matlock Bath (old Bath) hot, 68 degrees, and baths; and (new Bath) hot, and baths, by faults.
Middleton by Wirksworth W (Boota) on 3rd toadstone; and N NW (Wood) hot, formerly, and an open bath, in Bonsal dale.
Middleton by Yolgrave E (Well-head) large, in 1st lime.
Millington-green E, near Kirk-Ireton, sulphureous.
Morley-park, near Heage, chalybeate.
Oakerthorpe in South Winfield (Sough) ochrey.
Oakthorp N, in Measham, an overflowing coal-shaft.
Over-Haddon S (Wells) on clay wayboard; and SW, large, at great Bakewell fault, in Robinstye mine.
Parwich Town, temporary, from 4th lime.
Quarndon Town, chalybeate, 49½ degrees, near the great Derbyshire fault.
Scarcliff SW (Palter-head) on yellow lime.
Shottle in Duffield, sulphureous, in shale.
Simondley SW, in Glossop, ochrey and corrosive.
Slaley SW (Mary-grot) in Bonsal dale, petrifying, on 3rd toadstone.
Small-dale, SW of Peak Forest, in 4th lime.
Stanfrey NW, in Bolsover (Shuttlewood Spa) sulphureous, an open bath, by the Zig-zag fault.
Stanley, near Morley, chalybeate.
Stoke W, near Stoney Middleton (Sough) warm, burning.
Stony Middleton NE, warm, 63 degrees, an open bath, petrifying, near a great fault, ranging to Great Hucklow.
Taddington S (Wells) on 2nd toadstone.
Tibshelf, chalybeate.
Tideswell, N NW, intermitting, formerly; 1½ m. NW, on 2nd toadstone; S (Dale) petrifying.
Tissington Town, in shale limestone.
Troway SE (Sough) ochrey and corrosive.
Tunstead NW, and S SW, on 2nd toadstone.
West-Hallam E, sulphureous.
Whittington E, chalybeate, sulphureous, in coal-shale.
Wirksworth Church-yard, and SW, large, formerly, drained by Hannage sough, a bath formerly.
Woodlands in Hope, SE end of Doctor-gate, ochrey.
Wormhill S (Flag dale) two very large ones, in 4th lime.

Mineral Waters.

The mineral and medicinal waters of Derbyshire are, as might be expected in a country abounding with fossils, remarkably numerous. All those of a chalybeate and sulphureous nature, arise in beds of shale, and probably derive their impregnation from this substance; the warm springs also are observed to appear near these beds, though they break out in the stratum of limestone almost exclusively. The most celebrated *warm springs* are those at Matlock and Buxton; they occur likewise at Stony Middleton; and Middleton, near Wirksworth, had formerly a spring of this description, which was cut off some years since by driving a sough to remove the water from some lead mines in the neighbourhood. Those of Matlock and Buxton have obtained much celebrity for their medicinal properties, and are annually visited by a considerable afflux of company, who resort to them as well for pleasure as for health.

The natural history of the Matlock and Buxton waters occupied much of the attention of the lamented Dr. Darwin, whose death has deprived society of one of its most valuable members, and science of her most distinguished son. His principal observations were contained in a letter written to the Rev. Mr. Pilkington, and published in the "View of Derbyshire." The very interesting nature of this communication, and the light it casts upon the origin of warm springs, wherever situated, must be our apology for the insertion of considerable extracts.

"Several philosophers have supposed that the warm springs of this county acquire their heat from the chemical decomposition of pyrites; and it was affirmed by the late Mr. Tissington, and has been lately cited in an ingenious work of Mr. Kirwan on Mineralogy, that the warm water about Matlock owed its heat to the blue marl, which is mixed with pyrites, and is found in thin strata above and below the beds of lava, or toadstone; but it has since been observed, that, though warm water was found sometimes in these beds of pyrites and marl, yet, that no smell or taste then attended it, which must have occurred, if the pyrites had been in a state of decomposition; and secondly, that cold water was found in these beds oftener than warm.

"The arguments in favour of another opinion appear to me to be much more conclusive, viz. *that the water of these springs is raised in vapour by subterraneous fires deep in the earth, and that this vapour is condensed under the surface of the mountains in the vicinity of the springs.*

"1. The heat of these springs has been invariable, perhaps, for many centuries; certainly, as long as we have had good thermometers; which shows that the water, which they arise from, is in a boiling state in some part of the earth. For as boiling water acquires a certain degree of heat, viz. 212, the steam which arises from it (where it is not confined) must always be of that degree of heat. Now the internal parts of the earth, a few feet below the surface, being always, both in winter and summer, of forty-eight degrees of heat; it follows, that if the steam of water, after it is condensed, flows through a given distance of the cold earth, it will become cooled from 212 to some degree of heat above 48, proportional to the distance between the mountain in which it is condensed, and the place of its exit: and thus may, for many ages, preserve an uniformity of the de-

CHAP. 1. Mineral Waters.

gree of heat, which could not happen, if it was produced by chemical combinations of materials near the surface of the earth.

"2. In the very dry summer of 1780, when all the cold springs in this part of the country either totally ceased, or were much diminished, I was well informed on the spot, both at Matlock and Buxton, that the warm springs had suffered no observable decrease of their water. Whence I conclude, that the sources of these warm springs were at a much greater depth below the surface of the earth than the cold ones; and that, on that account, the water must first have been raised in the form of steam from those greater depths. Another circumstance shows, that the source of many of these waters is situated beneath the origin of the cold springs; even after the steam which produces them is condensed into water; which is, that their heat continues always the same both in winter and summer, in wet seasons and in dry; evincing, that no cold water from the dews, or springs in consequence of them, is mixed with these sources of warm water, &c.

"3. The rocks of limestone in all this part of the country abound with perpendicular clefts, in which are found the ores of zinc, lead, and copper; and it is hence probable, that not only the steam of water *at present*, which produces these warm springs, but that those metals themselves, and the fluor, or baroselenite, which attends them, have, in *former ages*, been raised into those perpendicular clefts by the great subterraneous fires, which raised the continents and islands from the primeval ocean.

"4. The existence of central fires in the earth in the *early ages* of the world, is demonstrated by the elevation of the solid parts of the globe above the ocean, and the shattered condition of its strata, with the immense masses of lava then produced, which go under the names of toadstone, basaltes, moor-stone, porphyry, and granite, as are so well explained in Mr. Whitehurst's and in Dr. Hutton's Theories of the Earth. The *present* existence of central fires seems probable from the many volcanoes, which are *spiracula*, or chimnies, belonging to those great fires; and it is probable, that by the escape of elastic vapours from these, is owing the small extent of modern earthquakes, compared with those of remote antiquity, the vestiges of which remain all over the globe. Another argument for the present existence of immense subterraneous fires, is, that the great earthquake at Lisbon produced undulations on the lakes of Scotland; and was felt in the mines of Derbyshire; (Philos. Transact.) which could not easily happen, but by a percussion on one side of a confined fluid lava, which would be propagated to the other; as striking the gentlest blow on one side of a bladder distended with water, is felt by the hand placed on the other side: to which may be added, that in some mines the deeper you descend, the warmer you perceive them, &c.

"5. Because there are springs of hot water in all countries, where open volcanoes evidently exist: whence from analogy we may conclude, that the hot springs in countries where open volcanoes have existed, but are not now open, are owing to the same cause acting in a less powerful manner.

"6. Add to this, that if those waters had been heated by the chemical decomposition of pyrites, some of them at least would probably have retained a strong chalybeate taste, or sulphureous smell; or that they would all of them have been impregnated with some similar material, which, on

the chemical analysis of these waters of Buxton and Matlock, does not appear to be the fact.

"7. I come now to another circumstance, which very much corroborates the above theory of the production of these springs from the steam raised from deep subterraneous fires, and not from any decomposition of pyrites. The strata in this part of Derbyshire consist of beds of limestone, and of lava (or toadstone) which lie reciprocally one above the other. Now if we suppose the steam rising from subterraneous fires to be owing partly to water slowly subsiding upon those fires, and to limestone gradually calcined by them, it must happen, that the steam rising through the perpendicular clefts in the supercumbent rocks, must be replete with calcareous gas, (fixed air) or with some phlogisticated air.*

"If this steam, so impregnated, be condensed in limestone strata, the fixed air in this hot steam will super-saturate itself again with calcareous earth.† Now this is what precisely happens to the waters of Matlock, which are replete with calcareous particles, as appears by the copious deposition of *tupha*, or calcareous incrustations, along the channels in which they flow. For, in general, it happens, that springs of water wear themselves valleys from their sources, as is done by the water at Buxton; but those springs at Matlock have produced rocks and mountains of a sponge-like calcareous stone between their fountains and the Derwent, with which all the houses at Matlock are constructed, and many of the stone fences.

"In the beginning of October, 1780, I was present, with my friend Mr. Edgeworth, at the opening of two of the springs at Matlock, about 200 yards above their usual places of appearance. We found them both at these new openings about one degree of heat, or somewhat more, warmer than at their places of usual exit. The upper one, which could be best seen, issued from some cracks or fissures in the upper surface of a bed of toadstone, and between it and the blue marl which lies over it; under which marl it seems to have been condensed, and thence to have super-saturated itself with calcareous particles. I examined this marl by means of acids, and found it to be calcareous, except some shining bits of whitish pyrites, which had no appearance of being in a state of decomposition.

"On the contrary, the steam which produces the water at Buxton, is probably condensed in the substance of the toadstone, or lava, and not in a stratum of marl or limestone, like the Matlock water; and hence the great difference of their contents. As one edge of these strata of limestone and lava, wherever there are springs, is always elevated higher than the other, it would be easy, by attending to the inclination of these strata, to discover

* "Dr. Priestley, from five ouncesof limestone, obtained 1160 ounce-measures of air, nine-tenths of which was fixed air, and the other tenth phlogisticated air. From four ounces of white-spar he obtained 830 ounce-measures of air; the first portion of which had but one-fourth of fixed air; which, however, varied in the course of the experiment, being once three-fourths, then one-half, then one-third of fixed air."

† "It may seem extraordinary that fixed air, or calcareous gas, which is known to precipitate lime from water, should render limestone more soluble in water. This, however, is evinced by the experiments of Mr. Cavendish, who added to lime-water, which had been rendered turbid by means of calcareous gas, more of the same gas, which enabled the water to re-dissolve the precipitated limestone. Water, by a large quantity of calcareous gas, will thus, in close vessels, super-saturate itself with lime; which will gradually precipitate in the form of limestone, when exposed to the air, by the evaporation of the superfluous gas."

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on which side of the bath is situated the mountain in which the steam is condensed, which probably may not be more than a mile or two from the eruption of the springs; because, on opening the springs at Matlock at a place about 200 yards above the Wells, the water (though already collected into a kind of vein) was cooled more than a degree; and this cooling must proceed much faster where the water is diffusely and thinly spread between two contiguous strata: and further, as the progress of this water must warm in some degree the surface of the earth, beneath which it passes after its condensation, and particularly at the place of its condensation, it is not improbable but its course might be detected by observations made in rhymy mornings, or when snow has lain long on the ground, by the melting or disappearing of it first in that part; or, perhaps, by the earlier vegetation of the grass or trees on those parts of the surface. A Mr. Taylor, who once kept this bath, produced early vegetables, by conveying a stream of the warm water under a border of his garden. If this source should ever be discovered by mining, I suppose the water, by being received nearer the place of its devaporation, would be found of a greater degree of heat, from 82, its present heat, up to 212, or the heat of boiling water.

"The contents of the waters of Buxton and Matlock must countenance the theory above delivered; for if steam be raised from subterraneous furnaces, where limestone is probably in a state of calcination, much calcareous gas, or fixed air, and some phlogisticated air, would arise with the aqueous steam: these are found in the Buxton water, in the loose state of bubbles, according to the analysis of Dr. Pearson; and in this the Buxton water resembles the waters at Bath, which are said, by Dr. Priestley, to possess similar kinds of air; and as these airs seem to be the principal ingredients of both these waters, there is reason to believe, both from this circumstance, and from their success in relieving similar diseases, that their medicinal powers are very similar, &c.

"In the Buxton water the fixed air is found in loose bubbles, because it does not meet with any kind of calcareous earth, or limestone, to combine itself with: in the Matlock water the contrary occurs; it has no loose air-bubbles, because the fixable air is combined with lime, and thus this water is replete with calcareous earth in subtile solution; and in this respect I suppose resembles the Bristol water.

"By the experiments of Bergman and Scheele, it appears that the stony concretions in animal bodies consist of saccharine acid and air, and that this acid has a greater affinity than any other to calcareous earth.* Now as the saccharine acid is perpetually generated in the stomach during the digestion of our aliment, it is probable that the salutary effects of these

* "I cannot leave this account of calcareous or hard waters without adding, that I suppose, from the great affinity between calcareous earth and saccharine acid, may be explained a circumstance, the theory of which has never been understood, and therefore the fact has generally been doubted; and that is, that hard waters make stronger beer than soft ones. I appeal to the brewers of Burton for the fact, who have the soft water of the Trent running on one side of their brewhouses; and yet prefer universally the hard or calcareous water supplied by their pumps. I suppose there may be some saccharine acid in the malt (which is not all of it equally perfectly made into sugar by the vegetable digestive power of the germinating barley) which, by its attracting the calcareous earth of hard waters, may produce a kind of mineral sugar, which, like the true sugar, may be convertible into spirit: for a similar purpose, I suppose lime is used by the sugar-bakers in refining their sugars, though the theory of its effects is unknown to them."

calcareous waters, such as Matlock and Bristol, may be owing to their saturating the super-abundancy of this saccharine acid, and that thus they may prevent the tendency which some of our fluid secretions possess, of producing calculous, and perhaps gouty and bilious concretions; and prevent the increase in size of those already formed: on the same principle they may tend to render purulent matter less acrimonious, as they are supposed to be of advantage in pulmonary and scrophulous ulcers, &c."

The most in repute of the sulphureous waters of Derbyshire rises in the park of Lord Scarsdale, at Kedleston. In a glass it looks very clear and transparent; but in the well, it appears of a blackish blue colour, tinged with purple; and any substance thrown into it, assumes the same appearance. That it is impregnated with sulphur, in some state or form, is not only evident from its strong taste and smell, but likewise from its changing silver to a dark copper colour: and in its passage from the well, a whitish sediment is deposited, which has the appearance of sulphur. That it is also impregnated with other substances, is proved by the experiments of Dr. Short, who observes, that eight pints evaporated, left two scruples of sediment, twenty-one grains of which were a dark brownish earth, and the rest salt: in these respects it appears similar to the water at Harrogate.

Kedleston water is principally valued for its anti-scorbutic qualities. When taken inwardly, it acts as a diuretic, and has given relief to persons afflicted with the gravel. It has also been found efficacious, from external application, in various cutaneous diseases, but more especially in ulcerous complaints. In the summer it is frequently used by the inhabitants of Derby as a substitute for malt liquor, at their meals: the charge of carriage (one penny per quart) affording sustenance to a few poor people of the neighbourhood. The temperature of the spring is about forty-seven degrees. Several other sulphureous springs rise in different parts of the county, but have hitherto undergone very little examination.

The chalybeate waters are numerous; but the most celebrated spring of this nature is at Quarndon, about three miles from Derby. Persons of a weak and relaxed habit have been much benefited by its use: when taken in sufficient quantity, it generally operates as a purgative; yet, to produce this effect, exercise is sometimes necessary. From the experiments made by Dr. Short, it appears, that a pint contains one grain of fixed salt; and that two gallons, when evaporated, leave half a dram of a light-coloured sediment, half of which is nitrous earth. Its temperature is nearly forty-nine and a half. Within 200 yards of the warm spring at Buxton, there is a chalybeate water of similar properties to that at Quarndon; the most essential difference is, that the fixed air, by which the iron is held in solution in the latter, may be set at liberty with a more moderate degree of heat than is requisite for the same purpose in that at Buxton: its taste, also, is less rough and irony. Other chalybeate waters are found at Morley, Chesterfield, Tibshelf, Duffield, and Bradley.

In the liberty of Heage, about midway between Crich and Belper, is a martial vitriolic spring, the only one that has yet been found in this county. It is situated on a black boggy soil, and was discovered about thirty years ago by a labouring man, who was employed in forming a sough to drain some of the neighbouring grounds. He had long been afflicted with an

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ulcerous disorder in one of his legs, but observed, that during the continuance of his labour, it gradually disappeared, and by the time his undertaking was completed, he had received an entire cure. This induced a supposition that the spring was possessed of medicinal properties, and when examined, the fact became evident from the vitriolic taste of the water. It has been thought to contain fixed air in some quantity; not only from the number of bubbles which may be seen in it, when first poured into a glass at the spring, but likewise from the circumstance, that when tightly enclosed in a cask or bottle, it will break either with a slight degree of agitation; an effect attributed to the efforts of the fixed air to make its escape. Besides the beneficial efficacy of Heage water in ulcerous diseases, it has been found useful in stopping inward bleedings; and when applied outwardly, is said to have this effect, as soon, and completely, as extract of Saturn.*

Ebbing and flowing Well.

The ebbing and flowing Well is situated nearly midway between Chapel-en-le-Frith and Tideswell, close to the south side of the turnpike road, and immediately under a steep hill, which rises to the height of more than one hundred feet. The well is merely a small pool, of an irregular form, but nearly approaching to a crescent shape, with flat stones placed edgeways, apparently intended as a watering place for cattle, from two to three feet deep, and about six or seven yards in width. The motion of the water, from which it has obtained its name, is by no means regular, but seems to depend on the quantity of rain which falls in the different seasons of the year. In very dry seasons, it has sometimes ceased to flow for two, three, or four weeks together; and several instances of this kind have been observed within the last thirty or forty years. Sometimes it flows only once in twelve hours; but at others, every hour; and in very wet weather, perhaps twice or thrice within that time. When it first begins to rise, the current can only be perceived by the slow movement of the blades of grass, or other light bodies that float upon the surface: yet, before the expiration of a minute, the water issues in considerable quantity, with a guggling noise, from several small apertures on the south and west sides. The interval of time betwixt the ebbing and flowing is generally stated to be four minutes and a half: the quantity of water it discharges at different periods also varies. In October, 1802, after a few showery days, it flowed and ebbed once in about three quarters of an hour; the whole time it continued to flow was four minutes and a half. In this space it rose more than five inches; and would probably have been three times that height, if the water had been confined; but as one side of the pool is lower than the other, the water falls into a ditch that skirts the road. Having ceased to flow, it remained a few seconds stationary, and then began to run back. The retro-

* We have been favoured by Dr. Gilbert with the following additional remarks. The waters of Matlock, like those of Bristol and Buxton, are of the calcareous class. When taken at the fountain, long experience assigns them highly restorative, strengthening, and curative powers; especially in pulmonary cases and nervous disorders. Ancient and modern practice alike direct the use of the Hot Baths, as the most powerful agent in the preservation of health, in the cure of rheumatism, and in the greater portion of inflammatory, acute and chronic disorders. Almost all nations of the remotest antiquity have had their Warm Baths. The northern nations from the Hot Bath plunge into snow, proving the power acquired by warm bathing in resisting cold and the vicissitudes of temperature.

grade motion continued nearly three minutes, when the Well assumed its former quiescent state.

Ebbing and flowing Well.

A spring of a similar nature formerly existed at Tideswell, from which that place, very probably, derived its name. It is now choked up, and no person at present alive seems to retain any certain recollection of its ebbing and flowing, although sometimes water accumulates around the rubbish. In 1729 it was visited by Mr. J. Martyn, who states, in the philosophical transactions of that period, that its tides were, then, very far from being regular. Mr. Pilkington was informed that the well might be easily restored to its former state; of this there must necessarily be some doubt, for the spring, after the lapse of nearly a century, will probably have found another and a more regular channel.

Rivers.

After the Springs, we naturally proceed to describe the Rivers, and those smaller streams, which having their rise in the Ridges, enumerated at page 6, form, by their confluence, increasing currents, and are at length received, through some common channel, into the ocean.

Of the waters of the Derbyshire hills, some arrive at the eastern coast of the island, and flow into the German sea; others reach the western coast, where they unite with the waters of the Irish sea. The eastern estuary or maritime channel is the Humber; that in the west is the Mersey.

The HUMBER receives the Trent and the Don.
The MERSEY receives, and is formed by the junction of, the Goyte and the Etherow. It also receives the Dane, through the Weaver.
The TRENT receives the Dove, the Derwent, the Erewash and the Mease.*
The DON receives the Sheaf and the Rother.
The *Dove* receives the Schoo, the Spiniford, and other smaller Derbyshire streams on its eastern bank.†
The *Derwent*, on its eastern bank, receives the Bootle, the Amber, the Hathersage and North Lees brook. On its western bank, the Wye,‡ (into which flow the united streams of the Bradford and Lathkill) the Morledge, the Ecclesbourne, the Barbrook, the Burbage, the Noe or Now, the Ashop, and the Wrongsley or Trough.
The *Erewash* receives on its western bank, the Nutbrook and other smaller streams.
The *Mease* receives the Willesley and Lullington brooks.
The *Sheaf* receives some small mountain streams on the boundaries of Yorkshire and Derbyshire.
The *Rother* receives the Hipper, the Dolee, the Winfield brook, and the Wingerworth, Temple-Normanton, Sudbrook, and several other streams which rise in Scarsdale.
To the westward, the *Goyte* and the *Etherow*, before their united waters form the Mersey, receive numerous mountain streams from the High Peak, the most remarkable of which are the small romantic rivers called the Shelf and the Sett.
The *Dane*, which rises in this county amongst the Axe-head mountains, flows into Cheshire, and there its waters are received by the Weaver, a branch of the Mersey.

The Trent.

The Trent is the largest river in this county. According to Mr. Farey's calculation, ten thirteenths of all the waters of Derbyshire flow into it. Its course from its sources upon the borders of Cheshire is nearly south-east through Staffordshire. A little northward of Croxall it receives the Mease on its right bank, and, having taken a north-easterly direction, it becomes a boundary of this county from the mouth of the Mease to Newton Solney; opposite to which, on its left bank, it receives the Dove. From Newton Solney it keeps an indented course through the southern district of Derbyshire to Donington park, east of King's Newton, receiving on its left bank the confluence of the Eggington and Etwall brooks, and on its right bank,

* The Idle, a river of Nottinghamshire and Yorkshire, has four of its head-springs in the yellow lime in Derbyshire. The branches of the Idle, formed by the confluence of these springs, are the Meden or Meaden, and the Worksop. The Idle falls into the Trent at West-Stockwith.

† The celebrated Hamps and Manifold fall into the western banks of the Dove, and are therefore rivers of Staffordshire.

‡ The Wye also receives the Tideswell brook and other streams.

CHAP. I. The Trent.

a considerable rivulet at Repton and at King's Newton. The Trent then becomes a boundary between Derbyshire and Leicestershire as far as the mouth of the Soar, and between Derbyshire and Nottinghamshire from the Soar to the mouth of the Erewash. About two miles before its junction with the Soar, the Trent receives, on its left bank, the Derwent. The course of this important river, from the point where it enters Derbyshire until its waters leave the borders of the county, is through a wide and fruitful valley excavated in the red marl, which, at Bladon, Scropley, and Holy-well hills, rises to steep ridges on the right bank of the river. At Ingleby there is a gravel rock, and at Weston cliff, the red marl and freestone form the northern embankment, while at Donington the same strata form the southern embankment. The vale of the Trent, with the small vales of its auxiliary brooks, exclusively of the vales of the Erewash, the Derwent, the Dove and the Mease, occupies about 70,000 acres of the surface of Derbyshire.

The names of rivers may generally be traced to the language of the Britons, and it is perfectly ridiculous to suppose, with some antiquarians, that the appellation of this is derived from the French *Trente* or thirty, upon the supposition that it has *thirty* auxiliary brooks and streams. Camden justly censures such "ignorant and idle pretenders;" but Milton, caught, apparently, by the conceit, in "a vacation exercise at college" written in all the scholastic quaintness of that era, makes *relation* thus draw the attention of *quantity* and *quality* to nature.

> "Rivers, arise; whether thou be the son
> Of utmost Tweed, or Ouse, or gulphy Dun,
> Or *Trent, who, like some earth-born giant, spreads*
> *His* thirty* *arms along the indented meads, &c.*"

The Derwent.

The Trent affords this county its only remaining natural navigation, and that only for about five miles on the south-eastern boundary, between Shardlow and Barton-ferry. Of this more particular notice will be taken in describing the internal traffic of Derbyshire.

The Derwent is the chief of our native rivers. It rises among the alpine ridges of the Peak, and its main source is at a place called the Trough,† where the gritstone rocks form the boundary between Derbyshire and Yorkshire. Numerous minor springs and streamlets, which when surcharged with rain become torrents, unite with this principal or eastern-waterhead, and at a small town called Derwent, the waters constitute a rapid river. These waters are soon afterwards increased with those of the Ashop and the Noe or Now, and having passed to the westward of Hathersage, they are again augmented by the Burbage and the Barbrook from the tracks of the great eastern moor. The bed of this river, from its source until it approaches Matlock, is chiefly gritstone and shale: but from the foot of the High Tor to Cromford bridge, it flows over the alternations of limestone and toadstone strata. The course of the Derwent from Hathersage is nearly south through Chatsworth park to Rowsley, where it re-

* In some editions this word is printed *thirsty*.
† See Farey, Vol. I. p. 4, 473.

ceives the Wye, and thence, its course inclining rather more to the east, it flows through Matlock, Cromford, Belper and Derby. From Cromford to some miles below Belper, the bed of the stream is chiefly gritstone rock and grit-shale, and then until within about a mile of Derby, it intersects some wide deposits of quartz-gravel and limestone shale. The remainder of its course until its junction with the Trent near the village of Wilne, is through red marl, sandy quartz-gravel, and patches of limestone rock.

The Derwent, together with its brooks and rivulets, collect within this county the waters of about 271,500 acres, besides the drainage of nearly 5000 acres of Yorkshire, at the stream-heads of various of its earliest channels, and the drainage of more than twice that extent of the surface of Nottinghamshire, through a branch of the Amber which has its source in the yellow-lime westward of Sutton in Ashfield.

For diversity of character and picturesque beauty, the Derwent has merited the encomiums of numerous travellers. Mr. Rhodes, in one of his elegant tours, has the following passage:—"In the space of forty miles, which includes the whole course of this river, from the highest and wildest parts of the Peak to the town of Derby, scenery more richly diversified with beauty can hardly any where be found. Generally, its banks are luxuriously wooded; the oak, the elm, the alder and the ash, flourish abundantly along its course; beneath the shade of whose united branches the Derwent is sometimes secluded from the eye of the traveller, and becomes a companion for the ear alone; then suddenly emerging into day, it spreads through a more open valley, or, winding round the base of some huge mountain or rocky precipice, reflects their dark sides as it glides beneath. Sometimes, this ever-varying and ever-pleasing stream, precipitates its foaming waters over the rugged projections and rocky fragments that interrupt its way; again the ruffled waves subside, and the current steals smoothly and gently through the vale, clear and almost imperceptible in motion.—What an emblem of the busy world does this river present, when contemplated through its various windings, from its source among the heathy hills of Derbyshire to its confluence with the Trent! In the immense multitude that compose the aggregate of mankind, there are many who seek the sequestered shades of a still and retired life—who shun the tumult of society, and seclude themselves, not only from the eye of the traveller, but who pass through life equally unknowing and unknown. Others rush into day, and like the Derwent, pouring through the more open and sunny meadows, court and attract the gaze of all around them, and live only in proportion as they become the object to which public attention is directed. There are likewise those who delight to mix in the agitated scenes of a troubled world, and whose pursuits partake the character of the Derwent, when forcing an impetuous passage over the disparted fragments of rock that obstruct its channel and impede its course."* Other travellers have particularly remarked the contrast between the pleasingly pastoral valley of Darley, through which this river flows, through verdant banks and richly cultivated declivities, and the Dale of Matlock, where its course becomes suddenly engulfed in a narrow ravine of romantic rocks.

* Rhodes's Peak Scenery, Part 3. sect. 6.

CHAP. 1.

The Derwent.

"Here the High Tor
Rears its vast head, along whose broad bold base
Impatient *Derwent* foams among the crags,
Roaring impetuous, till his force all lost,
Gentle and still, a deep and silent stream,
He scarcely seems to move: o'er him the boughs
Bend their green foliage, shivering with the wind,
And dip into his surface." *Darwin.*

It will belong to another part of this work to enumerate the cotton and other mills, which derive their power from the waters of the Derwent. Those waters have a dark hue occasionally approaching even to blackness, which may be attributed to the swarthy moors, and probably to beds of coal, which its channel traverses: their temperature is also observed to be higher than that of other rivers, a circumstance which must be ascribed to the numerous warm springs that mix with its current during its progress.

The Dove.

The Dove takes its rise among cavities of gritstone and coal-shale, near Thatch marsh colliery, *between the great and middle Axe-edge hills. The scenery around the sources of this beautiful river presents tracks of barren mountainous ridges covered with heath, from which the traveller has extensive views, on one hand, over the fruitful and thickly peopled plains of Staffordshire and Cheshire, and, on the other, the dreary and sometimes stupendous elevations of the Peak. After cutting through the gritstone rock, this small but rapid branch is joined by another stream which passes by a village called Dove-Head, and has been selected by Walton the angler, and by Edwards, the poet of the Dove, as the original stream.

"At length 'tis gained, the heathy cloud-capt mountain!
Not at the hamlet of Dove-head I rest,
But, higher up, beside a bubbling fountain,
That makes within a little well its nest.
Here springs the Dove! and with a grateful zest
I drink its waters, that first serve the poor.
O, when shall they repose on ocean's breast?
How long must their rough pilgrimage endure?
They ask not, but commence their wild romantic tour."
Edwards.

The course of this extraordinary stream passes thrice over what the geologists who have investigated the strata of this county, term the great limestone fault, and consequently intersects rocks of the earliest formation. Through a valley, called Beresford dale, which is scarcely half a mile in extent, its course is upon the fourth limestone: but in the valley, particularly denominated Dove dale, it rushes amid precipitous rocks, and opens to the inquisitive eye of the scientific student more of the general series of strata than is any where else to be contemplated in the same limited extent throughout England. After passing between the two surprising hills of limestone, Thorpe cloud and Bunster, the bed of the river is formed of the *débris* of the neighbouring rocks, consisting of quartz-gravel, thin limestones, and other alluvial matter; while as its waters proceed towards Ashburne, they gradually enter the red marl, but not without bringing with them gritstone sand, and limestone pebbles, which are in some

* See Farey, Vol. I. p. 479.

places along their course thickly and extensively deposited. Even where the Dove empties itself into the Trent at Newton-Solney ford, the red marl is covered with deposits of quartz sand and gravel which the stream has carried onward from the abrupt and mountainous tracts through which it has passed.—The picturesque beauty of the banks of the Dove has been the repeated theme of travellers, whether painters or poets. Mr. Rhodes, to whose elegant work we are already indebted for descriptive extracts of the richest character, says, "The river Dove is one of the most beautiful streams that ever gave a charm to landscape; and while passing along the first and least picturesque divisions of the dale, the ear was soothed with its murmurings, and the eye delighted with the brilliancy of its waters: in some places it flows smoothly and solemnly along, but never slowly; in others, its motion is rapid, impetuous, and even turbulent. The ash, the hazel, the slender osier, and the graceful birch, hung with honeysuckles and wild roses, dip their pensile branches in the stream, and break its surface into beauteous ripples. Huge fragments of stone, toppled from the rocks above, and partly covered with moss and plants that haunt and love the water, divide the stream into many currents; round these it bubbles in limpid rills, that circle into innumerable eddies, which, by their activity, give life and motion to a numerous variety of aquatic plants that grow in the bed of the river: these wave their slender stems under the surface of the water, which flowing over them, like the transparent varnish of a picture, brings forth the most vivid colouring. Occasionally large stones are thrown across the stream, and interrupt its progress: over and among these it rushes rapidly into the pool below, forming in its frequent falls a series of fairy cascades, about which it foams and sparkles with a beauty and brilliancy peculiar to this lively and romantic river."—The waters of this river have a clear blue tint, deepening through various shades to a dark purple. The limestone over which they flow renders them fertile, and when they overflow their banks in the spring they enrich the adjacent meadows. This has given occasion to this proverb:

"In April Dove's flood
Is worth a king's good!"

These floods are, however, sometimes so sudden, that the waters have been known to rise and fall again in the course of a day, carrying down their channel flocks of sheep and herds of cattle. Such inundations are caused by what are termed "shots of water," which the Dove often receives in its course through the mountains. Cotton, whose verses seldom rise to any very elevated strain of sentiment, has in his quaint poem on the Wonders of the Peak, the following lines on the Dove, which constitute its most beautiful passage:

——— "Thy murmurs, Dove,
Pleasing to lovers, or men fall'n in love,
With thy bright beauties and thy fair blue eyes,
Wound like a Parthian, while the shooter flies.
Of all fair Thetis' daughters none so bright,
So pleasant to the taste,—none to the sight,—
None yields the gentle angler such delight:—

To which the bounty of her stream is such,
As only with a swift and transient touch,
T' enrich her barren borders as she glides,
And force sweet flowers from their marble sides."

The Erewash.

The Erewash rises from a bed of gravel, on the skirts of Sherwood-forest near Kirkby, it then passes through a district of blue clayey ground, and intersects the yellow limestone and the coal strata on the borders of this county. It enters upon its embankments of red marl about Stapleton mill, and forming a wide excavation, in red marl and quartz-gravel, it falls into the Trent at Barton-ferry. The principal places upon its banks are Pinxton, Codnor park, Ilkeston and Sandiacre. The course of the Erewash is to the south, and it forms a great part of the boundary between Nottinghamshire and Derbyshire.

The Measc.

The Mease originates in the red marl on Smithsby common. In its course, it excavates the coal-field, near Ashby-de-la-Zouch, and flows over the quartz-gravel which is found in the great red marl beds between Measham and the banks of the Trent. It falls into the Trent, north of Croxall, by a wide excavation in the red marl, partially filled with sandy quartz-gravel.—The Mease passes Packington, Stretton-in-the-fields, Edingale and Croxall.

The smaller rivers most deserving notice are those which fall into the

The Amber.

Derwent.—Of these, the Amber is one of the most important. This stream has two considerable branches; the head branch takes its rise in the coal-shale near Ashover, and then flows through a series of denudations or exposed strata highly interesting to the geologist: these are the first limestone and its accompanying toadstone, and a long interrupted bed of limestone shale; it then intersects the whole series of gritstone, and passes through vast tracks of limestone and coal-shale until it enters the Derwent at Toad-moor bridge, upon a bed of limestone, over which the deposits of its waters form a curious bed of thin limestone and gritstone pebbles. The Nottinghamshire branch of this river, acts as a superior drainage across the great coal-field upon the eastern boundaries of this county and Nottinghamshire; and, it has been justly observed, that there is scarcely a rivulet in the kingdom, from the course of which more practical geological information may be derived.

The Bootle.

The Bootle, which flows into the Derwent at a short distance south of Little Eaton, also crosses the great interruption, or fault of the midland coal-field, and, in so doing, intersects the earliest gritstone.

The Wye.

The Wye, one of the most interesting rivers in the county, has its source among the Axe-edge-hills, and flows through a bed of shale to the north of the baths at Buxton. From that town to Mill-dale, its course is over the third limestone and the third toadstone; and the dale is a ravine in these strata and in the fourth limestone rock. The channel of this romantic stream is chiefly through confined dells with precipitous rocks, displaying all the various strata, until it empties itself into the Derwent at Great Rowsley upon the limestone shale. About a mile from Buxton is the craggy precipice known by the name of the Lover's leap, from the height of which it is fearful to look down into the chasm beneath, through which the slender stream gushes amidst the broken rocks. The Chee Tor is a vast

perpendicular rock, and may be well denominated the Giant of the Dell. This rock is limestone, and rises abruptly to the height of 360 feet above the river: the rocks in front rest upon a grassy elevation which embanks the Wye, and affords a pleasing contrast to the dark brows of these projections. The projections themselves take a concave sweep through a semicircular valley answering to the bold projection of the Tor. "In Millers' dale," says Mr. Rhodes, "the river, which had been pent up within a narrow chasm, appears to rejoice at its release, as it quietly spreads into a more ample stream and glides leisurely away. This is a delightful dale, and it abounds with scenes, that as they are beheld, sooth and tranquillize the mind. The stream is never turbulent—never still; and though in some places the huge branch of a gnarled oak, or a weather beaten elm, shoots from a cleft or fissure in the rock above, in a manner that suggests a recollection of the pictures of Salvator, yet the light and elegant foliage with which it is accompanied, subdues every feature of wildness, and softens down the whole to beauty: the mills—the leapings that are thrown across the river—the cottages embosomed in trees, or overhung with rock —every object in the dale is fraught with beauty." We must leave the still superior attractions of Cressbrook dale and Monsal dale to the imagination, or to the personal investigation of the reader, well assured that the former, however vivid, can scarcely exceed the sublimity blended with natural elegance, and occasionally with pastoral simplicity, which characterises this interesting stream, and that the latter will be amply rewarded.

The Wye.

The Bradford takes its rise in shale near Elton, and flows through a channel in the first limestone, until it meets the Lathkil in an excavated bed of tufa below Alport.—The Lathkil has its source or rather sources among the hills near Monyash: its waters flow through the third, the second, and first limestone and toadstone strata. The scenery on its banks, though it has not the grandeur and rich diversity of the Dove or the Wye, is romantic and beautiful. At a short distance below Over Haddon, the rocks on both sides of the stream are crowned with trees of various kinds, and its transparent waters flow through beds of the brightest verdure.—The whole length of the Bradford is only about two miles; but, as Mr. Rhodes observes, "it is two miles of beauty. Approaching Alport, we came to a spot where it loses its name in the Lathkil. A high rock, called Bradford Tor, crested with trees and light depending branches, occupies the right of the river that washes its base. The left bank is a steep verdant slope, surmounted with a group of dwellings, half hid amongst orchard trees, ash and sycamore. Near these, a bridge leads into the village, from whose arch the Lathkil rushes impetuously, and dashing and foaming along its rugged channel, leaps into the Bradford, at the foot of the Tor. Nothing can exceed the beauty of this brilliant stream, as it bounds and sparkles along its rapid descent."*

The Bradford and Lathkil.

The other less important streams are sufficiently noticed at the head of this article, and we shall therefore only further observe, that the rivers of this county are well supplied with fish, the particular species of which will be noted in a chapter on the natural history of Derbyshire. With respect

* Rhodes's Peak Scenery, Part 3. sect. 8.

CHAP. I. Rivers.

to what has been stated upon the testimony of various authors, relative to the higher temperature of the Derwent and other rivers of this district, it must be received with hesitation. It is justly observed by Mr. Farey, that there is a very inconsiderable quantity of such warm spring water, and that there is nothing like a general warmth perceivable in the strata anywhere; as far therefore as such warmth in any of the streams is perceptible, it must be attributed to the great depth and narrowness of the valleys, which preserve "this temperature longer than in more open situations."

This account of the *Rivers* in Derbyshire may be closed with this statement of the portion of Derbyshire which each drains, viz.

	Acres.		*Acres.*
Amber (except a part in Notts.)	31,000	Mease (intermixed with Leicestershire)	16,000
Ashop	13,000	Morledge	13,000
Bootle	8,000	Noe	15,000
Bradford and Lathkil	20,000	Nutbrook	10,000
Dane (upper part)	580	Rother (upper parts)	45,000
Derwent (except a part in Yorkshire)	111,500	Schoo	10,000
Dolee (except a part in Notts.)	15,000	Sence (in Ravenstone)	2,000
Dove (only the east side)	81,000	Sheaf (upper part)	5,000
Ecclesburn	15,000	Shelf	10,000
Erewash (only the west side)	17,000	Trent (middle parts)	70,000
Etherow (only the south side)	10,000	Wye	45,000
Goyte (only the east side)	31,000		
Hipper	7,000	Total of Derbyshire	622,080
Idle (upper parts)	21,000		

Of the cascades in this county, the following is a passage from Mr. Farey's work:

Cascades and Waterfalls.

"In some of the rocky districts of Derbyshire, there are *water-falls* or natural cascades in the brooks and rivulets, in wet times, or falling into chasms or water-swallows; these I noticed, at

Alport town, in the Lathkil, on tufa and 1st lime.
Edale chapel, N. near Castleton (the font) on 1st grit.
Grindlow near Eyam, into Dowse-hole, in 1st lime.
Kinder NE, near Hayfield (down-fall, or old woman brewing) on 1st grit, very high and romantic.
Lumsdale, NE of Matlock, on 1st grit, high and romantic.
Monyash E, Ricklow dale, on 1st lime.
Over-Haddon S, in Lathkil, on 2nd lime.
Peak-forest S (Dam-dale) on 3rd toadstone.
Phoside S, in Glossop, on 1st grit.
Stoney-Middleton (Mill) on 1st lime.

Ponds and Reservoirs.

There are no lakes in this county, but the following is a list of the reservoirs, &c.

Barlborough NE, 4 reservoirs for the Chesterfield canal; and NW, 4 fish ponds.
Bradley S, a fish pond.
Bretby, S and E of Bretby-hall, fish ponds.
Butterley NW, near Pentrich, a large reservoir for the Cromford canal.
Calke N, fish ponds.
Chapel-en-le-Frith SW (Comb's-brook) a reservoir for the Peak forest canal.
Chatsworth Park, SW of Edensor, fish ponds in the Derwent; and E, 2 reservoirs in the old park.
Church Gresley NE (Milk-hill pool) old mill pond.
Darley W NW (Flash) a reservoir for toad-hole mills.
Eggington SW, fish ponds, in the Dove.
Formark N, a fish pond.
Foston S, near Sudbury, a fish pond.
Golden Valley, N of Codnor-park, 2 reservoirs for the Cromford canal.
Hardwick, W and NE, in Hault-Hucknal, fish ponds.
Kedleston E, large fish ponds in the Morledge brook.
Kelstedge W, in Ashover, a mill pond.
Locko Park, near Chaddesden, a fish pond.
Longford SE, a mill pond.
Loscoe E, near Heanor, a large mill pond.
Markeaton SE, a fish pond in the Morledge brook.
Melbourn S, a mill pond.
Mellor W SW, in Glossop, cotton-mill pond.
New Brampton W SW, near Chesterfield, a mill pond.
North Winfield S, (Park) mill pond.
Osmaston SW (Cottage) fish ponds.
Overseal NE, Leicestershire (Barrot pool) mill pond; and NW (Union) reservoir for the Ashby-de-la-Zouch canal.
Peak Forest SE, a mill pond.
Pentrich SW, a mill pond.

Pinxton S, a mill pond.
Radborne W SW, a fish pond.
Renishaw SW, a fish pond.
Repton S, (Park) fish pond.
Shipley NW, large fish ponds.
South Winfield NE (Toad-hole furnace) mill pond.
Stanesby S, in Smalley, a mill pond.
Staveley W (Forge) mill pond.
Sudbury S, a fish pond.
Sutton N, in Scarsdale, fish ponds.
Swanwick SE (Delves) pond.
Tapton W, near Chesterfield, a fish pond.
Willesley W, near Measham, a fish pond.
Wingerworth (Park) fish ponds; and W (Stubbing) fish ponds.
Woodthorp SE, in Staveley, a mill pond."

Scenic character.

From the numerous extracts already given from Mr. Rhodes's Peak Scenery, a tolerable good idea of the natural features and general scenic character of the county must have been obtained. The valleys possess an interesting combination of romantic wildness and rural beauty: in many there are lofty ranges of rock, where the different strata "running horizontally athwart their sides," assume tower-like and turreted forms, which so absolutely possess the appearance of "an old castellated building, that, viewed from the road below, the eye sometimes doubts whether it contemplates the work of nature or of art."* From the same author we take the following descriptive passages, "——we had attained the summit of the highest rock. Over this we had to pass or recede. The gulf that yawned below could not be contemplated without emotions of horror. We stood on a steep shelving bank, covered with a thin slippery grass, unsafe and even dangerous to tread upon. A sheep-track was the only path that lay before us, and this was carried so near the brink of the precipice, that I could not have beheld a goat or any thing that had life placed in so perilous a situation without trembling. We were now 400 feet above the little stream that washed the base of the rock where we stood, and a glimpse into the fearful depth below was appalling and terrific."†——"This deep ravine is closely hemmed in with rock on every side; and, with a solitary exception, neither shrub nor tree is to be seen within it. Rude weather-beaten crags, with occasionally a stripe of thin mossy verdure inserted between, constitute the two sides of the dell, which, in some places, is from eighty to one hundred paces wide, and in others not more than twenty or thirty. About two-thirds up the dell, the view towards Castleton has a wildness about it that no other landscape in the same neighbourhood possesses. The castle, seated on the extreme verge of a narrow ridge of rock, looks fearfully tremendous, borrowing importance from the situation it occupies amongst the rocks and precipices that are thrown around it. Near the village, where the two sides of the dell approximate, a pleasing view is admitted of distant hills, whose shadowy summits and cultivated slopes give a character of loveliness to the remote parts of the scene."‡

This will suffice to afford the reader a general view of the picturesque beauty of the vales of Derbyshire, which are strongly contrasted by the dreary and desolate tracts of country around them; but even in the barren moors are gradually yielding to the hand of cultivation. In the southern districts of the Peak this is particularly observable, and as the traveller advances towards the rich marly banks of the Trent, he finds himself surrounded with corn lands, farm houses and villages, with all the pleasing bustle of rural industry.

* Rhodes's Description of Middleton Dale.
† Ibid. Banks of the Wye.
‡ Ibid. Cave Dale.

CHAP. I. Climate.

The climate of this county is necessarily very various. The north-western district with its mountains elevated into the current of the clouds, receive their contents in the form of rain, hail or snow, and there the winters are generally long and severe. Mr. Farey however remarks, that in his long sojournments in the Peak hundreds, he "saw or heard none of those *violent storms*, and ravages on the lands by *torrents of rain*, which are mentioned by some, even of the most recent descriptions of the county." He, however, admits that at Buxton and in the wide valleys among the gritstone hills, there is frequently an unusual quantity of rain, particularly about July, and that the snow falls in the Peak districts at least ten days earlier, and lies on the earth ten days later, than in the southern parts of the county. In speaking of corn remaining out in the fields in the High Peak, at Christmas, he is of opinion that such occurrences must be attributed not so much to the climate as to "neglect and mismanagement on the part of the farmer."

Winds.

The winds are generally brisk, and sometimes violent among the mountainous districts, but it does not appear that they come more from one quarter than another, although it has been asserted that they are seldom found to blow across the compass either from the south-east or the north-west; and it has also been remarked "that a west wind, however high or strong it may blow for a short time, seldom continues long to do so."*

Rain.

Mr. Farey gives an abstract of the rain which fell at Chatsworth during 50 years past, ascertained by an excellent and well-attended Rain-Guage in the gardens at that place. The following are the yearly totals, viz. in 1761, 26·525 inches; in 1762, 23·399 inches; and in

Years.	*Inches.*	*Years.*	*Inches.*	*Years.*	*Inches.*	*Years.*	*Inches.*
1763 ...	36·399	1775 ...	33·749	1787 ...	32·068	1799 ...	30·995
1764 ...	34·262	1776 ...	29·892	1788 ...	19·856	1800 ...	27·732
1765 ...	27·536	1777 ...	24·794	1789 ..	36·309	1801 ...	28·345
1766 ...	25·235	1778 ...	29·895	1790 ...	26·892	1802 ...	23·340
1767 ...	30·723	1779 ...	24·582	1791 ...	34·698	1803 ...	24·270
1768 ...	39·919	1780 ...	19·443	1792 ...	34·740	1804 ...	47·904
1769 ...	27·255	1781 ...	23·065	1793 ...	24·316	1805 ...	22·232
1770 ...	29·446	1782 ...	39·115	1794 ...	30·769	1806 ...	30·182
1771 ...	22·433	1783 ...	29·526	1795 ...	23·531	1807 ...	26·365
1772 ...	30·842	1784 ...	22·976	1796 ...	24·280	1808 ...	28·509
1773 ...	31·281	1785 ...	23·162	1797 ...	30·129	1809 ...	29·911
1774 ...	31·522	1786 ...	30·676	1798 ...	27·562	1810 ...	27·984

The total depth of water fallen in this period, including melted snow, being more than 119 feet, and giving a yearly average of 28·411 inches; the greatest yearly depths being 39·919 inches (in 1768,) 39·115 inches (in 1782,) 36·399 inches (in 1763,) 36·309 inches (in 1789,) &c.; and the least, 19·443 inches (in 1780,) 19·856 inches (in 1788,) 22·232 inches (in 1805,) 22·433 inches (in 1771,) &c.

The following table contains the mean average quantity of rain collected in Derby from the beginning of 1809 to the end of 1827, being nineteen years, by Mr. Swanwick.

* Farey, Vol. I. p. 98.

Rain.

	Inches.		Inches.		Inches.
January	1·41	June	1·78	November	2·41
February	1·60	July	2·06	December	2.31
March	1·70	August	2·29		
April	1·68	September	2·13		24·32
May	2·09	October	2·86		

Total average for the year being 24 inches and $\frac{1}{3}$.

Temperature.

Mr. Pilkington has observed, that during a period of twelve years the thermometer never fell below 5 degrees, nor rose above 85. In most summers it varies from 64 to 74 degrees. During sharp frosts it remains at about 14 degrees. The air on the mountainous parts of Derbyshire is for the most part clear and dry: it receives little heat from the rays of the sun, and must consequently be colder than in lower situations, but it is also considered to be comparatively more pure and healthful.

Health and Longevity.

With the exception of one disorder to which the inhabitants of mountainous countries are said to be more or less subject, there are no epidemic diseases in Derbyshire, and the average duration of human life is calculated rather higher here than in other English counties.* The disorder to which we allude is the *bronchocele* or *Derbyshire neck*. In Switzerland, particularly in the Vallais, the people are subject to excrescences on the throat similar to the *Derbyshire neck*, and the cause is said to be the *springs* which are impregnated with *tufa*, nearly similar to the incrustations at Matlock. The Rev. Mr. Davies thus describes this complaint as it appears in this county. "It is a swelling seated on the fore-part of the throat, occasioned by the enlargement of the *thyroid gland*; but not unfrequently the gland becomes subdivided into several fleshy portions, connected closely to each other by cellular membranes. The form and contents of this tumour are very various: during the first years of its existence it is reddish, and moderately compressible; endowed with little sensibility, highly vascular in its texture, not readily going into suppuration, and leaving the external skin of its natural colour. It is generally believed that the swelling, in the greater number of cases, is truly *sarcomatous* or fleshy; while some have said the bronchocele consists of a honey-like matter; others that it contains little portions of bone and hair; others, that it is inflated by air; and some that it is distended by a watery or puriform fluid: all these opinions may be occasionally true. Females, children, and persons of relaxed and delicate constitutions, are more subject to this affliction than males, adults, and persons whose habits are rigid and vigorous: but sometimes persons of apparently good constitutions, of either sex, are affected by it."†

* The following are the most remarkable instances of Longevity in the county:
Sir Ralph Vernon, styled the long liver, Sudbury, in the reign of Edw. II. aged 150.
Thomas Withers, of Heath, near Chesterfield, died May 3, 1827, aged 102.
Mrs. Turner, died at Morewood Moor, near Alfreton, Dec. 4, 1827, aged 103.
Adam Wolley, of Allen Hill, near Matlock, died in 1657, aged 100.
Grace Wolley, wife of the above, died in 1669, aged 110.
Cornelius Chrich, died at Ashover, in 1789, aged 101.
Sarah Hollins, died at Somercotes, about 1820, aged 102.
Mary Bate, died at Beighton, in 1792, aged 105.
Mrs. Bakewell, died at Derby, in 1791, aged 99.
William Cooke, died at Barlbrough, in 1640, aged 100.
In Taddington Churchyard is the following inscription. Here lies the body of William Hewed, who departed this life Nov. 19, 1718, aged 218.
Mary Gratton, died at Taddington, in 1795, aged 101.
Alice Buckley, died at Taddington, about the year 1821, aged 106.

† Davies's View of Derbyshire.

CHAPTER II.

Geology and subterranean geography of Derbyshire. Principal strata, and their positions. Gravel: clay: marl: magnesian limestone. Coal-measures, fault, &c. in the great coal field. Gritstone: mineral limestone and toadstone strata, mineral veins, &c.: fourth limestone, its gulfs or caverns and fault. Soils. Minerals. Mining. List of Derbyshire minerals. Lead, and modes of working the veins, &c. Copper. Iron. Coals, modes of working, &c. Marbles, stone quarries: slates, &c. Earths. Summary.

CHAP. 2. Geology.

THE coals, iron, lead and marble found beneath the surface of the earth, constitute much of the wealth of this county, while the violence which in the northern districts has broken up the layers or coats of the globe, has also disclosed to our investigation the regular position of those layers or lamina which form the earth's incrustment. Miners must for ages have known that beds of a more or less close or cohesive nature, of different colours, and apparently of very dissimilar matter, lay over each other in particular districts, but the scientific study and classification of these beds is comparatively very modern. A German writer named Lehman, observed, that "the lower rocks in some of the mining districts were distinguished from the upper rocks by their hardness and by their structure, which was for the most part either crystalline or slaty; they were also distinguished by the absence of shells and other organic remains, and by the absence of fragments of other rocks which occur so frequently in the upper rocks or strata. He further observed, that many of the upper strata, besides containing organic remains, appeared to have been formed of fragments of the lower rocks, broken down and agglutinated together; and hence he inferred, that the lower rocks were formed prior to the creation of animals, and he gave them the name of *primitive* or *primary*, and distinguished the upper by the name of *secondary*."* But it is not in the nature of geology to make rapid advances, and its investigations have much oftener served for grounds of dispute than for the advancement of science. Geologists have formed systems when they ought to have been contented with the slow process of acquiring facts, and they have been discussing whether fire or water has been the agent in breaking up these masses of strata, and of thereby affording them the means of research, instead of quietly accumulating the abundance of facts thus offered to their contemplation. The best and now most general arrangement of the strata to be found in their writings, is the following:

1. Primary.
2. Intermediate or transition.
3. Secondary; comprising the lower secondary series and the upper secondary series.

* Bakewell's Introduction to Geology.

4. Tertiary.
5. Basaltic and volcanic.
6. Diluvial and alluvial.

The *Primary rocks* contain no fossil remains of animals or vegetables. —*Transition or intermediate rocks* are less crystalline than the primary, and occasionally contain organic remains of the most inferior animals.— Many of the *Secondary rocks* abound exclusively in the fossil remains of vegetables, analogous to ferns, palms and reeds; while the rocks in the former or transition class contain exclusively the remains of marine animals. In the *upper* series of *secondary* rocks there are organic remains of marine animals, but of different genera and species from those in the lower rocks.—"It is in rocks of this species," observes Bakewell, "that we first meet with remains of animals of a higher class, which are possessed of a brain or spinal marrow; but these vertebrated animals are all of the oviparous order, such as fish, or the saurian or lizard tribe."*—The *Tertiary* strata are the uppermost of all the regular rock formations: they consist chiefly of clay, limestone, and friable sandstone: they contain marine shells, and shells resembling those found in fresh water; and some of these strata "contain numerous bones of quadrupeds of the class mammalia, but these for the most part belong to genera and species which no longer exist upon the earth."†— *Volcanic and basaltic rocks* cover in an irregular manner the rocks of the preceding classes, but their origin is much disputed.— *Diluvial and alluvial* deposites indicate the action of mighty inundations, which have swept over the face of different districts of the globe, and generally consist of thick beds of sand or clay, and fragments of rock and loose stones, more or less rounded by attrition. "The classes of rock above enumerated have their appropriate mineral productions, and with the exception of rocks of the first class, their appropriate remains; and it would be as useless to search for regular beds of common coal in the primary rocks, as it would be to search for metallic veins or statuary marble in the tertiary strata."‡

To explain the positions of these strata as they are found in Derbyshire, we refer our readers to the geological plate, which represents various sections within the county. That in the first compartment marked (A) represents a section of the strata between Grange mill and Darley moor. The upper outline shows the surface of the earth; the numbers 1, 2, 3, 4, &c. the respective strata. Under the river Derwent is represented a fissure filled up with rubble: but, there is reason to believe, that Mr. Whitehurst, from whose excellent work we have taken this illustration, was mistaken in supposing that the strata was so much broken beneath the bed of this river.

No. 1. *Millstone-grit*, 120 yards. A coarse sandstone, composed of granulated quartz and quartz pebbles. The former retain the sharpness of fragments newly broken, the latter are rounded as stones on the sea shore. This stratum is not productive of minerals, nor figured stones representing any part of the animal or vegetable kingdoms.

* Bakewell's Introduction to Geology. † Ibid.

‡ Ibid. It may be proper to observe, that this slight geological sketch is abridged wholly from Mr. Bakewell's Introduction.

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The quartz pebbles contained in this stratum, indicate a pre-existent state; for it is well known that quartz is a parasitical substance, formed in the fissures of a quartzose stone, as spar is formed in those of limestone, and not in strata. This shows that the pebbles were first formed in fissures; that the strata were broken, and their fragments rounded by attrition, as stones on the sea beach, or in rivers.

The quartz pebbles abovementioned are white; the colour of the quartzose stones from whence they are produced is black, brown, &c. They are in common use for paving streets, and are frequently variegated with seams of white quartz running through them. They are the common gravel-stone of Nottinghamshire, Staffordshire, Derbyshire, &c.

Quartzose stone is analagous to flint; it strikes fire with steel, and resists acids. It is less hard than flint, and breaks with a rough surface.

We are told that the minerals in Norway and Sweden are contained in the fissures of a quartzose stone.

No. 2. *Shale* or *shiver,* 120 yards. A black laminated clay, much indurated, contains neither animal nor vegetable impressions, and is not considered as a stratum productive of minerals, as lead ore, spar, &c. though an instance or two has appeared to the contrary, in a mine called Shaw-engine, near Eyam, attended with a curious circumstance. A vein of lead ore in No. 3, ascended into No. 2, fifteen or twenty fathoms; and the higher it ascended, the less and less it was mineralized, till it terminated in a white mucus-like substance. Mr. Whitehurst states that he had this information from people of veracity.

Quære. Was the ore generated from the mucus-like substance? or was that substance the product of ore decomposed by the acid contained in that stratum?

The above stratum contains ironstone in nodules, and sometimes stratified. The springs issuing from it are of the chalybeate kind: for instance, one near the bridge at Buxton, one at Quarndon, and another beyond Matlock bridge, towards Chatsworth.

No. 3. *Limestone,* 50 yards. Productive of lead ore, the ore of zinc, calamine, pyrites, spar, fluor, cauk, and chert. This stratum also contains figured stones, representing various kinds of marine animals; as a great variety of *anemiæ bivalves,* not known to exist in the British seas; also *coralloids, entrochi* or screw-stones.

The impression of a crocodile was found in the above bed of stone, at Ashford, by Mr. Henry Watson of Bakewell.

The above stratum is composed of various *laminæ,* more or less separated by shale or shiver, a substance similar to No. 2; especially the upper, which are a good black, take a fine polish, and are thence called black marble. The lower *laminæ* are rather brown, as may be observed in the rocks composing Matlock High-Tor.

The ore of zinc is commonly called black-jack and mock-ore, from its similitude to lead ore. It is but lately discovered to contain zinc. When compounded with copper it makes brass, as calamine. Calamine, though similar in its mineral qualities, is apparently a simple brown earth; it is commonly used in medicine by the name of *lapis calaminaris.*

No. 4. *Toadstone,* 16 yards. A blackish substance, very hard; contains

bladder-holes, like the scoria of metals, or Iceland lava, and has the same chemical property of resisting acids. Some of its bladder-holes are filled with spar, others only in part, and others again are quite empty. This stratum is not laminated, but consists of one entire solid mass, and breaks alike in all directions. It does not produce any minerals, or figured stones representing any part of the animal or vegetable creation, nor any adventitious bodies enveloped in it; but is as much an uniform mass as any vitrified substance whatever can be supposed to be: neither does it universally prevail, as the limestone strata; nor is it, like them, equally thick; but in some instances varies in thickness from six feet to six hundred, as will be shown hereafter. It is likewise attended with other circumstances which leave no room to doubt of its being as much a lava as that which flows from Hecla, Vesuvius, or Ætna.

The various circumstances relative to this apparent lava will be considered in their due place, with some attempt to investigate the cause of its introduction between the limestone strata; and to show why it did not overflow the surface of the earth, according to the usual operations of volcanoes.

It must be observed, that the above stratum is known by the following names of *black-stone* and *toad-stone* at Matlock and Winster; at Monyash and Tideswell, by that of *channel;* and at Castleton, by that of *cat-dirt*.

No. 5. *Limestone,* 25 fathoms. This stratum is laminated like the former, No. 3, and contains all the same kinds of minerals and figured stones. It is likewise productive of the Derbyshire marble, so much esteemed for its beauty and excellence in slabs and chimney-pieces. It abounds more plentifully with *entrochi,* or screw-stone, than any other marine productions. The quarry from whence this marble is commonly raised, is situate on Monyash moor, near the road, between that town and Bakewell; its colour is grey.

No. 6. *Toadstone,* 23 fathoms. This stratum is similar to No. 4, in colour and chemical properties; but yet more solid, and freer from bladder holes, as may be observed in Mosey-meer mine, near Winster.

No. 7. *Limestone,* 30 fathoms. Laminated like the former No. 3 and 5, and like them contains minerals and figured stones; but fewer of the latter. Its colour is much whiter than No. 5.

No. 8. *Toadstone,* 11 fathoms. This stratum is similar to No. 6, but yet more solid, as may be observed in Hubberdale mine, near Monyash.

No. 9. *Limestone,* not yet cut through. Productive of minerals and figured stones, like the former, No. 3, 5, and 7, but very few of the latter.

N. B. No vegetable forms have yet been discovered in any of the limestone strata.*

The compartment marked (B) exhibits a section of the strata at Matlock High Tor. The numbers 1, 2, 3, 4, 5, on each side the river show the corresponding strata, which as they have a different inclination may be supposed to be dislocated, but Mr. Farey states that the miners have driven a *gate* across under the river, in solid and unbroken measures.

The compartment marked (C) is copied from Bakewell's Introduction

* See Whitehurst, Appendix.

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to Geology, and displays the arrangement of the strata from Sheffield in Yorkshire to Castleton in Derbyshire. "The town of Sheffield (fig. 1.) is built over coal strata, which rise towards the west, and disappear in that direction about five miles from Sheffield (fig. 2.) Here the under rock makes its appearance (fig. 3.) which is a bed of coarse gritstone, more than one hundred and twenty yards in thickness, forming the summits of all the mountains as you advance to the vale of the Derwent (fig. 4.) The grit-rock rests upon a thicker bed, of a different kind, composed of slaty sandstone, represented (fig. 5.) On the western side of the valley, this rock exists only as a cap or covering on Whin-hill,* a lofty mountain marked (fig. 6.) Two miles further west the grit-rock disappears, and the slaty sandstone which is the base of Whin-hill forms the summit of the celebrated Mam-Tor, or the shivering mountain. The mountain limestone (fig. 7.) here makes its appearance as the base of Mam Tor, and, further west, the same limestone forms entire mountains. The difference observable in the rocks, east and west of the Derwent, is owing to the general rise of the strata in the latter direction. It is here obvious, that Whin-hill, though it appears an isolated mountain (or hummock) is only a portion of the thick beds of gritstone and slaty sandstone which form the hills on the other side of the valley."—This judiciously selected section, which we borrow with thanks from the intelligent author above mentioned, serves particularly to illustrate the fact, that all stratified mountains are only parts of extended strata, with which they were once united.

This extension of strata, which may generally be traced throughout all their disruptions, is further exemplified in compartment (F) which is a very diminished representation of Mr. White Watson's delineation of the strata of Derbyshire, from Bolsover in the east to Buxton in the west. The similar numbers on each side the great disruption at Brampton and Combs moss, show the extension of similar strata that seem to have been certainly once united. The following are the names of the strata represented, of which the very limited scale of the plate will only permit us to mark the most important; and these we hope will suffice to give the reader a general view of this line of stratification, which is indeed all that we can attempt in a work of this nature.

1. Crystallized granular or magnesian limestone
2. Argillaceous grit
3. Rock coal
4. Grit, shale, ironstone and clay
5. Rock coal
6. Shale with ironstone
7. Rock coal
8. Culmous grit
9. Coarse grit
10. Ferruginous grit
xa, xb, xc, xd. Ironstone and coal basins
11. Whetstone grit
12. Arenaceous grit
13. Compact grit. Cank
14. Fibrous rock coal
15. Organic grit
16. Friable grit
17. Bituminous shale and coal
18. Grindstone sandstone
19. Fatiscent grit
20. Rock coal
21. Clay, coal bind
22. Shelly rock coal
23. Millstone sandstone
24. Shale grit
25. Aluminous shale
26. Shell limestone
27. Basaltic amygdaloid
28. Scaly limestone. Dolomite
29. Basaltic amygdaloid
30. Compact sugar-limestone
31. Basalt

Principal Strata.

With these previous observations and references, it will not be difficult to understand the positions of the principal strata of Derbyshire.

First, the *gravel* or *alluvia* of this county claims attention, as occupying

* In our list of the hills (page 8.) this eminence will be found to be one of the hummocks on the north ridge of the Noe.

Geological Plate

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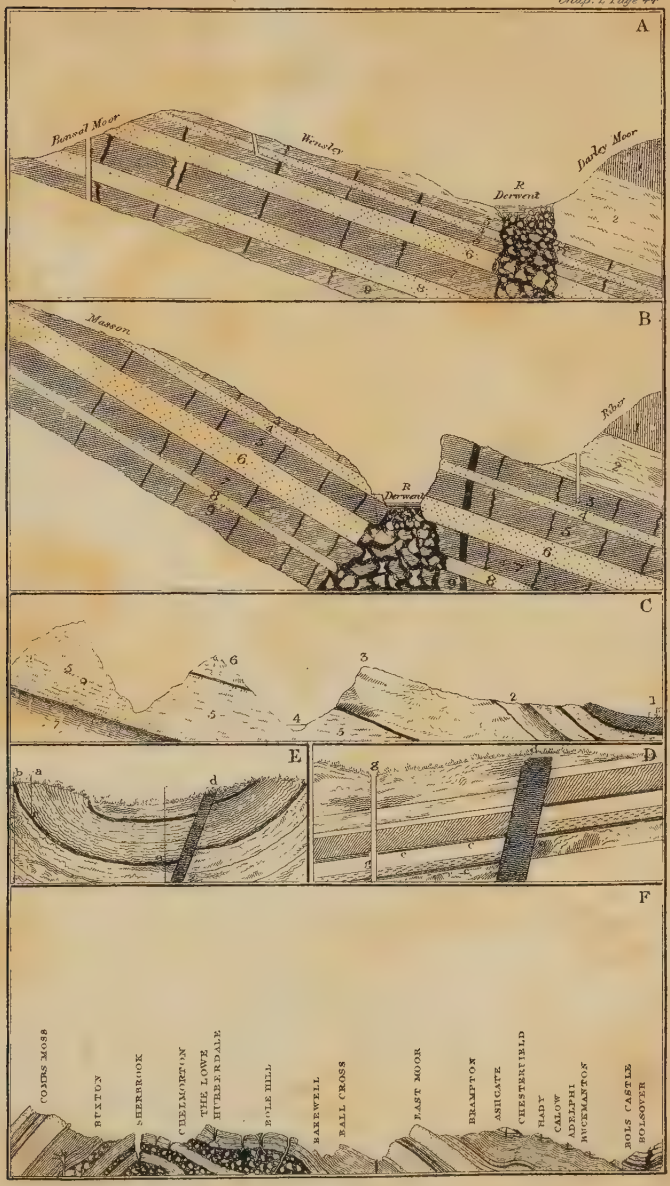

indiscriminately the surface of every other stratum. On the borders of Nottinghamshire, the gravel consists of alluvial sand and rounded quartz pebbles to the depth of above two hundred yards; and, in many parts, it is concreted into a soft gravel rock, or pudding-stone as some call it, and is irregularly stratified. Mr. Farey states, that in all his examination of this immense mass of gravel, he could not perceive, except upon the surface, a single pebble which belonged to the neighbouring strata, or to any stratum he had ever seen in England.* This vast mass of quartz gravel extends across Derbyshire into Staffordshire, leaving isolated patches of the red marl occasionally uncovered. It is sometimes mixed, in the middle district of the county, with sand and flints from the south-east, and with a few thin and partially rounded fragments of the Derbyshire mountain limestones, brought down by the Dove and Derwent rivers. The narrow valleys near Foremark and Bretby, and the sides of rivers and brooks, have generally an alluvial flat of loam upon the gravel, which produces excellent meadows. This foreign quartz gravel has lodged itself against dislocations of the strata and completed the regular form of the surface, as may be seen in the neighbourhood of Allestree, Mugginton and Ashbourn particularly. When mixed with clay and marl, the gravel frequently needs draining, and produces cold and rather poor lands. The surface of the county covered with this species of soil amounts to very nearly 77,000 acres.—Rounded stones are essential to gravel, but in some instances the stones in alluvial mixtures are angular, and often resemble the larger chippings of a stone mason's yard. Large stones, rounded by attrition, are called *bolders;* but if they retain the original shape and angles of the block, they are called *self-stones.* Another class of alluvial substances is the *slither* or indestructible rubble of limestone: and patches of *slither* are the most barren spots that can be imagined, not a blade of grass, a weed, or even a lichen being found upon them.

Red Marl.

2. *Red marl.* The regular stratum, which, except where it is interrupted by tracks or patches of gravel, covers the southern districts of Derbyshire, is called red marl. At a short distance north of Stapleford and Sandiacre, it crosses the Erewash, and extends from the eastern to the western boundaries of the county, passing near Stanton by Dale, Bredsall, Quarndon, Bradley, and Ashbourn. Its position is, in almost every place, very nearly horizontal; except that on the borders of Staffordshire near Stapenhill it dips to the north, and again at Stretton it inclines still more decidedly to the south-west. Experienced land-surveyors have remarked that the best tracts of land are upon this stratum; but the Derbyshire red marl is frequently found to be tenacious and cold, and to require draining, which, however, it amply repays. Bricks and tiles are made in great quantities from the more tenacious parts of this stratum. The surface of the red marl is much furrowed into valleys, disclosing the *bassets* of fine-grained micaceous *gritstone,* which become freestone quarries; and in some instances these beds are not concreted, but appear as *sand,* as at Normanton near Derby, Stepping lane, Radbourn common, &c. The red marl is also intersected with *marl stones,* in layers of a light grey or dingy green colour,

* Farey Vol. I. p. 132.

CHAP. 2. Red Marl.

particularly at Allestree, Breadsall, Littleover, &c. In Derbyshire, the red marl, according to the calculation of Mr. Farey, occupies about 81,000 acres of the surface.

Magnesian Limestone.

3. *Yellow or magnesian limestone.* These strata emerge first from under the mass of alluvial gravel in Nottinghamshire, and appear upon the borders of this county at Hardwick Hall and Hucknall, whence they stretch themselves across the north-eastern angle of the county by Bolsover* and Barlborough into Yorkshire. These important strata cover an immense series of *coal measures,* which basset from beneath them: they preserve a remarkably regular plane, having an easy dip to the eastward, and are of considerable thickness: their general tint is yellow, from a pale straw-colour to deep orange. They effervesce with acids only in those parts where they abound with magnesia, and are not generally found capable of calcination. In some places they are called clunch and mudstone, and perish gradually on exposure to the atmosphere. At Wild park, near Brailsford, and at Birchwood park near Norbury, patches of the yellow limestone strata are found, which appeared to Mr. Farey to be "very probable indications of a coal field. Beneath the regular strata of yellow limestone, there are found compact beds of *blue* limestone, imbedded in clay, and abounding with ammonia and other shells, and these differ in their properties from the yellow strata, and are found to be much more proper for agricultural purposes. The soil made by the yellow limestone strata is generally of a medium quality and degree of tenacity. It is much improved by applications of the Peak limestone, or of the lime from the blue beds beneath it. Mr. Farey considered it adapted for arable rather than pasture land, on account of its proneness to produce a sour grass called spiked fescue *(festuca pinnata)* which scarcely any animal will eat. In Derbyshire, the yellow limestone occupies nearly 21,000 acres.

Coal.

4. *Coal.* The portion of the great Yorkshire and Derbyshire *coal field* or *coal rake*† which belongs to this county, occupies a district of about twelve miles in width on its eastern side, and seems to be terminated on the south by that immense disruption of the strata, which Mr. Farey and other writers after him, have termed the great Derbyshire fault, already mentioned. By this disruption the coal measures are brought, in various places, from below the red marl and yellow lime, to a level with the red marl on the surface. This denudation of the coal is principally observable in the neighbourhood of Stanton by Dale, Stanley, Morley and Little Eaton. There is also another more irregular disruption of the strata which extends from Little Eaton to Kirk Hallam and West Hallam, and in this the ancient basset-pits or shallow workings appear. From the Hallams, this disruption spreads across the Erewash into Nottinghamshire, where the Bilborough and Nuthall coals, which are in some places worked below the magnesian

* See Explanation of White Watson's Section, p. 48.

† "The Yorkshire and Derbyshire coal-field, commences a little north of Leeds, and extends in breadth east and west about twenty-five miles, from Halifax to Abberford, and in length about seventy miles, from Leeds to near Nottingham and Derby. The breadth decreases southward, being little more than twelve miles in Derbyshire. South-west of Derbyshire there are a few small coal-fields near Ashby-de-la-Zouch, and near Tamworth, Atherstone, and Coventry. The latter coal-field is the most southern situation in which mineral coal has been discovered in the midland counties." *Bakewell's Introduction,* p. 496.

lime, rise almost to the surface. This disruption may be considered as the eastern boundary of the coal field: from Nuthall it takes a turn towards the north, it again enters Derbyshire near Pleasley; and at Palterton and its neighbourhood, coals have been worked under the yellow lime, and are so worked at Clown. At the western end of Barlborough, this irregular disruption touches the edge of the yellow lime and leaves no space for the basset of the upper part of the coal measures, but a little further to the north-east, there are the Knitaker or Knittacar collieries, which are worked both in the bassets and through the yellow lime. At the Pebbley and the Killamarsh mines, the eastern boundary of the great coal field enters Yorkshire. From the line of irregular disruption thus pointed out, the coal measures to the westward take a more rapid rise towards the districts of the High Peak. These continue to rise, with some local varieties and exceptions, until all the vast series of coal measures have basseted, and the first or millstone grit* appears from under them along a line which may be traced from Little Eaton through or near Belper, Crich, Tansley, Darley, Beeley, Chatsworth, Curbar, Fox-house, and so on to Hallam in Yorkshire.

Within this coal-field, and sometimes beyond its boundaries, there are denudations displaying detached portions or hummocks of coal measures, which often appear to have been torn from other places. Thus, at Ashover, the coal-shale with other strata have been stripped off from the grit and limestone shale; while the coal around Alderwasley seems to have been torn from the grit which lies naked near Crich, where the channel of the Derwent divides these coal measures from those at Lea. This denudation is still more remarkable at Belper, where detached coal measures are to be found in the deeply excavated vale of the Derwent. Isolated patches of coal are found at Combes Moss, a mountain of shale and grit, nearly north of Buxton, and there is evidence that similar and more extensive patches might be found on the Kinderscout range, north of Edale Chapel, concealed under the impassable peat bogs, which abound in that district.

The branch of the coal-field which extends into Leicestershire, may be regarded as a series of disruptions which has lifted up the yellow limestone and the coal strata through the red marl; the two former having rapid dips, while the marl preserves its usual horizontal position. It is in this branch that the collieries are formed at Gresley, Hartshorn, Measham, Donisthorpe, Newhall, Swadlingcote, &c.

Before we give a list of the collieries in this county, or describe the different manner of working them, it will be serviceable to extract the following passage from the work of Mr. Bakewell.—"Coal-fields are of limited extent, and the strata frequently dip to a common centre, being often arranged in basin-shaped concavities, which appear to have been originally

* "The mountains of transition limestone which extend through the Peak of Derbyshire, and through Craven in Yorkshire, abound exclusively with the organic remains of marine animals. *They are covered on the eastern side by two thick beds, which contain carbonaceous and bituminous matter and vegetable impressions.* The lowest is from 150 to 170 yards in thickness. It is called by Mr. Farey limestone shale, because it occurs over limestone. It is composed principally of thin strata of shale and sandstone. Where it is exposed to the air, it is of a dark reddish brown colour; over this lies a bed of coarse-grained siliceous sandstone, not less than 130 yards in thickness. It has been called millstone grit by Mr. Whitehurst, and the miners in the north of England, from being used for the purposes of millstones. These two beds separate the metalliferous limestone from the coal strata in that part of England; for though thin seams of coal sometimes are met with in them, they do not contain any of sufficient thickness to be worked." *Bakewell.*

CHAP. 2. Coal.

detached lakes, that were gradually filled by repeated depositions of carbonaceous and mineral matter. In some of the larger coal-fields the original form of the lake cannot be traced, but in the smaller ones it is distinctly observed. The different strata under a bed of coal are frequently similar to the strata over it; and the same series is again repeated under the lower beds of coal, and sometimes with a perfect similarity both in the succession and thickness of each.* In some instances, a single bed of stone of vast thickness, separates two beds of coal. In other instances, only a very thin stratum of shale or clay lies between coal beds.—Though numerous beds or seams of coal occur in one coal-field, very rarely more than three of these are worked. The thickness of the coal strata in the same coal-field often varies from a few inches to several yards; but each stratum generally pre-

* Frequently are readers disappointed in perusing topographical works, for the want of a few words of scientific explanation; and no county in England requires such explanation more amply than that which we are now describing. We shall, therefore, offer no apology, for extracting the following elucidations from the work of Mr. Bakewell, respecting coal-fields or basins, which by reference to the Geological plate, will enable strangers to visit our coal districts with much more gratification to themselves.—"Coal strata are frequently bent in concavities, resembling a trough or basin, dipping down on one side of the field and rising on the other. In the *Geological plate*, (*compartment* D) the section of a coal-field is represented in which the coal strata *c*, *c*, *d*, *d*, are inclined in this manner, but partially dislocated by a fracture or fault at *f*. The extremities of the farther strata *c*, *c*, are several miles distant in some coal-fields, in others not more than one mile. * * * * The depth of the coal strata is very different in different situations, and from the inclination or bending of the strata, differs much in the same district, as will be evident from what has been stated, and from the inspection of the plate. On the eastern side of England, the strata generally decline, or, in the miner's language, dip to the south-east point: on the western side, the strata are more frequently thrown into different and opposite directions, by what are called faults and dykes. * * * * A dyke is a wall of mineral matter, cutting through the strata in a position nearly vertical. . . . . The thickness of dykes varies from a few inches to twenty or thirty feet, and even yards. The dykes which intersect coal strata are composed of indurated clay or more frequently of basalt. . . . . In some coal-fields the strata are raised or thrown down on one side of a dyke one hundred and fifty yards or more; and the miner, after penetrating through it (see *Geol. plate, compartm.* E) instead of finding the same coal again, meets with beds of stone or clay on the other side at *e*: hence he is frequently at a loss how to proceed in searching for the coal which is thus cut off. If the stratum of stone *e* be the same as any of the strata which are sunk through in making the pit or shaft *g*, *g*, it proves that the bed of coal is thrown down on the side of the fault at *e*, and he can determine the exact distance between that stratum and the coal he is in search of. But if the stone is of a different kind to any which was above the coal *c*, *c*, he may be certain that the strata are raised on that side; but to what distance can only be ascertained by trial, if the under strata of the coal bed *c*, *c*, have not been previously perforated. It frequently happens, however, that two or more strata of stone or shale at different depths, are so similar in their quality and appearance, that it is impossible to distinguish them: in such cases it is necessary to perforate the stratum, to ascertain its thickness, and examine the quality of the strata above or below it, by which its identity with any known stratum may generally be ascertained. The manner in which the strata are inclined towards the fault, will also determine whether they are thrown up or down, provided they are not shattered where they come in contact with it, which is frequently the case. Each bed of coal in a coal-field has certain characters by which it may generally be known to be the same. Its thickness and the quality of the roof and floor, with that of the upper and under strata, generally serve to identify it, though it may sink deeper in one place than another, and vary in distance from the surface 500 feet. . . . . The dykes which intersect coal strata are generally impervious to water; and it not unfrequently happens, that where the strata decline to them, they hold up the water and occasion springs at the surface, or keep the coal-works on that side of the fault under water, when the coal-works on the other side are dry. This will be better understood by consulting the *Geol. plate*, (*comp.* D and E) where the coal strata on the right hand of the faults decline or dip to them; and the water which passes through or between the strata will be stopped at the faults and held up, should any of the lower strata be also impervious, in which case the coal beds to the right of the fault will be under water, and those on the other side dry. Now should a perforation be incautiously made through the dyke, all the water will be thrown upon the works on the left, that were before dry. Where the wall on each side of a fault belongs to different proprietors, a few strokes with a pick-axe may thus do incalculable mischief to those on the one side, and render great service to the other, by laying their pits dry."

serves the same thickness throughout its whole extent. Instances to the contrary sometimes occur, in which the same bed will become narrower or wider, and sometimes be divided by a stratum of incombustible earthy matter, in different parts of its course. Few beds of coal are worked at a great depth which are less than two feet in thickness. The stratum lying over a bed of coal is called the roof, and the stratum under it the floor. The facility of getting coal depends very much on the compactness of the stone which forms the roof, not only on account of the security from falling, but for keeping out the upper water and preserving the pit in a dry state. The great expense incurred in supporting the roof when it is loose, frequently prevents a valuable bed of coal from being worked, or absorbs all the profit. In some situations the roof is indurated clay, impregnated with bitumen and pyrites. When this falls down, and is intermixt with water and small coal at the bottom, it takes fire spontaneously; on which account the miners close up the space with common clay, where the coal has been worked, to prevent the access of air to the combustible matter."

The uppermost floor of all coal-measures is either an indurated clay, which has various appellations, or a peculiar kind of stone called crowstone or ganister, which generally belongs to the second and third coal shales. This crowstone is considered an important stratum, as it abounds in large and curious vegetable impressions, and as it is useful in road making, and very serviceable for making crucibles.—The slines, or length-way joints, which naturally divide the coal seams, vertically range for the most part in such a manner that the coals *face the two o'clock sun;* and it is observed by the colliers that these natural joints in the coal are not affected in their direction, by the dip, however rapid or easy; nor is it influenced by the tendency of the dip to any other point of the compass, nor is it checked or diverted by the faults. These curious facts (as Mr. Farey observes) seem to prove, that the kind of crystallization which broke the coal seams into their regular rhomboidal pieces, was completed prior to the faults and dislocations of the strata.—The whole extent of coal-measures in Derbyshire amounts to about 190,000 acres.

A list of COLLIERIES, *which are or have been in work in Derbyshire.*

List of Collieries.

Adelphi (or Duckmanton) furnace, E of Calow, near Long Duckmanton, 12th coal (an iron furnace and mines)
Aldercar (Ouler-car) near Langley-mill in Heanor (formerly)
Alderwasley, NW of the village, 1½ m. E of Wirksworth, 1st coal
Alfreton, S and SW of the town (formerly)
Alfreton furnace. See *Somercotes*
Alton, S of the village, 1¼ m. E NE of Ashover, 3rd coal, crowstone, brasses
Ankerbold near Tupton, ⅔ m. NW of North Winfield, 9th coal (formerly)
Arbor-lands, 1 m. S SW of Eckington, 9th coal (formerly)
Apperknowl common, E of Dronfield, 9th coal (lately)
Ash-gate in Brampton, 2 m. W of Chesterfield, 7th coal (formerly)
Aspinshaw, W of Hayfield in Glossop, 2nd coal
Bank, SE of the village, 1¼ m. SW of Holmsfield, 5th coal (formerly)
Barlborough-common, W of the town (formerly)
Barlow-common, ¼ m. W of the town, 8th coal (formerly)
Baslow, 1¾ m. E of the town, 2nd coal, brasses
Beeley moor, at S end of Chatsworth old park, 1 m. NE of Beeley, 1st coal (formerly) crowstone
Beighton-field, E SE of Barlborough (formerly)
Belper-gutter, ½ m. E of Belper, 2nd coal (formerly)
Belper lane-end, 1 m. NW of Belper, 1st coal, brasses
Belper town, NW of the church, 1st coal (formerly)
Bent, near White Moor, 1 m. NE of Belper, 2nd coal (formerly)
Benty-field, ⅔ m. E of Codnor, smithey coal
Berley-moor, N of the village, 2¾ m. W of Beighton, 10th coal
Berrisford-moor, W of Tupton (near Wingerworth furnace) ½ m. NW of North Winfield, 9th coal (formerly)
Berristow, 1 m. E NE of South Normanton (lately)
Biggin, 1 m. N NE of Tibshelf (formerly)

CHAP. 2.

List of Collieries.

Birkin-lane, 2¾m. NE of Ashover, 3rd coal, fire-clay, crowstone (lately)
Black-clough, (or Beat) ½ m. NW of Flash, in Hartington parish, 1st and 2nd coals, a great fault across the works, worked lately by a tunnel for boats
Blackwell, one-third mile NE of the town
Bole Hill, SE of the houses, 1¼m. SW of Eckington, 8th coal (formerly)
Bore-lane, S of Chisworth, 1⅞m. N NE of Mellor, in Glossop, 2nd coal
Boythorp, ¾m. S of Chesterfield, 9th coal
Bramley-moor, 2¼m. W of Eckington, 8th coal
Brampton. See *Little-common*
Bretby (Bradby) ¾m. NW of Newhall
Brians-coppy, 1¼m. S SW of Calke (formerly)
Brimmington, ½ m. W SW of the town, 8th coal
Brimmington-moor, 1 m. S of the town, 6th coal
Broadhurst-edge, 1½m. SE of Mellor, in Glossop, 3rd coal, crowstone
Bugsworth, NW of Chapel-en-le-Frith, in Glossop, 2nd coal
Burn'd-edge, in Ollerset, SW of Hayfield, 2nd coal
Butterley (Car) one-third mile NE of Ripley (an iron furnace and mines) worked formerly by a tunnel for boats
Butterley-park, 1 m. NE of Ripley (over the Cromford canal tunnel)
Calow, W of the village, 2 m. E of Chesterfield, 8th and 9th coals (formerly :) E NE, the 11th coal now getting
Carter-lane, 1 m. N of Pinxton church (lately)
Castle Hill, 1 m. N of Pentrich, 10th coal
Chatsworth Old Park, 1½ m. SE of Baslow, 2nd coal (formerly)
Chesterfield Furnace (E. Smith and Co.) ½ m. W SW of the town, 9th coal (formerly) an iron furnace and mines
Chesterfield town's-end, NW, 9th coal (formerly) now further NW.
Chevin-side, ¾m. SW of Belper, 1st coal (formerly)
Clay-cross, 1¼ m. SW of North Winfield, 9th coal (formerly)
Clown, ½ m. W of the town
Coal-Aston, 1 m. NE of Dronfield, 8th coal
Codnor, nether-park, 1½ m. NE of Codnor
Codnor, upper-park, 1¼ m. N NE of Codnor
Coldwell (or Cawdle) W of Renishaw hall, ½ m. S of Eckington, 10th coal (formerly)
Combes Moss, 2 m. N of Buxton, 1st coal (formerly)
Combs, SE of Charlesworth, 2½ m. SW of Glossop, 2nd coal
Compstal-bridge, 1½ m. NW of Mellor, in Glossop, 2nd coal
Cotmanhay-wood, 2 m. N of Ilkeston
Cowpasture, near Beard, in Glossop, 2⅝m. NW of Chapel-en-le-Frith, 2nd coal
Cutthorpe, ¾ m. S of Barlow, 8th coal (formerly)
Dale Abbey, NE of the chapel (formerly, with iron furnace and mines)
Dally-gutter, ¾ m. NW of Belper, 1st coal, brasses
Denby, NE of the church (formerly) 147 yards deep
Denby-hall, 1¼ m. N of Denby church
Dimmings-dale, ¾ m. E of Blackwell (formerly)
Donisthorpe, NE of the village, 1¼m. NW of Measham, pits 155½ yards deep, coals 17 feet thick
Dore, NE of the town, 2nd coal, brasses
Dronfield, ¼ m. NW of the town (formerly all round it) 8th coal
Duckmanton-common, 1 m. SW of Long Duckmanton chapel, 11th and 12th coals (formerly)
Duckmanton furnace. See *Adelphi*
Eaves-knowl (Bower's and Longder's pits) W and SW of New Mills, in Glossop, 2nd coal
Eckington, ¾m. SW of the church, 9th coal
Ernocroft. See *Shaw-hay*
Far-lane, SE of the houses, 1 m. NW of Barlow, 7th coal (formerly)
Ferneyford. See *West-Hallam*
Ferneylee, W of the houses, 3¾m. W SW of Chapel-en-le-Frith, 2nd coal (formerly)
Four-lane-ends, W of the inn, 1¼m. W of Alfreton, 10th coal (formerly)
Gander-lane, ¾ m. NE of Killamarsh (formerly)
Glass-house common, 1 m. N NE of Whittington, 8th coal
Gleedless-common, E and NE of the village, in Derbyshire and Yorkshire, 2¼m. SW of Hansworth, 8th coal (formerly)
Gosley-waste, 1 m. SW of Hartshorn (formerly)
Goyte-moss (or Coit) E and N of Moss-houses in Derbyshire and Cheshire, 2¼ m. W of Buxton, 2nd coal
Grass-hill (or Hasland) SE of Hasland, 2¼ m. SE of Chesterfield, 12th coal (an iron furnace and mines)
Grass-moor, ½ m. W of Temple Normanton, 12th coal
Grass-moor (Platt's) 1 m. W of Temple Normanton, 11th coal
Greenhill-lane, 2¼m. E SE of Alfreton
Greenwich, one-third mile E of Ripley, and 1¼ m. NW of Codnor
Gresley, one-third mile W of Church Gresley
Gresley-hall, N of Castle Gresley in Church Gresley (formerly)
Hady, ¾ m. E of Chesterfield, 8th coal
Hag, ¾m. NW of Dale-Abbey (formerly)
Hallam-bridge (or Nutbrook) 1 m. N of Stanton by Dale (formerly)
Hall-fields, ¾ m. SW of Newhall
Harstoft, W of the houses, 1½m. N of Tibshelf (formerly)
Harts-hay, 1 m. S of Pentrich, 12th coal
Hartshorn, ½ m. NE of the town (formerly) and ¾ m. S of the town (formerly)
Harwood Grange, ¾m. S of the Cupola, 2¾ m. E of Beeley (dug open, formerly)
Hasland NE, 1¼m. SE of Chesterfield, 9th coal (formerly)
Hasland. See *Grass-hill*
Hazlewell, ½ m. W of Barlborough (formerly)
Heage (or Buckland-hollow) N of the town, 4th coal (formerly)
Heage-bent (or nether-end) W and SW of the town, 3rd coal (formerly)
Heanor, ½ m. SE of the town, brasses, S, SW, and W of the town
Heath, ¾ m. W and SW of the town, and ½ m. NE, S, and SE, and in the intermediate space, 12th coal (formerly)
Henmore, 1¼m. W SW of North Winfield, Cannel, 8th coal
High-ash, NE of the houses, 1¼ m. W of Barlow, 7th coal (formerly)
Higham, S of the village, ½ m. W of Shirland, 9th coal
High-field-lane (Boden's) near Four-lane-ends, 1 m. W of Alfreton (formerly)
High-house (or Owlcotes) ½ m. NW of Heath, 12th coal
High-lane, N of the houses, 2¼ m. NW of Eckington, 8th coal
Hill-top, ½ m. S of Dronfield, 8th coal
Holbrook, one-third mile E of the town, 3rd coal (lately)
Hollingwood-common, ½ m. E of Brimmington, 8th, 9th, and 10th coals, worked by a tunnel for boats
Holly-wood (Bilborough) ¾ m. SE of Bilborough church, in Nottinghamshire, under yellow lime
Hopping-hill, E of the houses, 1¼m. S of Belper, 1st coal (formerly)
Horsecroft. See *Stanfrey*
Horsley, ¾ m. NE of the church, 4th coal (formerly)
Horsley-woodhouse, W of the houses, 1 m. NE of Horsley (formerly)
Ilkeston, S of the church (formerly)
Ilkeston-common (or Benersley) 1 m. NE of the town
Killamarsh nether-moor, ½ m. NW of the church, 12th coal (formerly)

Killamarsh, old-delph, S of the church, 13th coal (formerly)
Knitaker (or Nitticar) 1 m. NE of Barlborough, part under yellow lime (formerly) a great fault between this and Pebbley-lane colliery
Lane-end. See *Belper*
Langley Mill, S of the houses, ½ m. E of Heanor
Lea, S of the village, 2½ m. SE of Matlock, 1st coal (formerly)
Lees-hall, 1 m. NW of Norton, 5th coal
Lings, ¾ m. S SW of Temple-Normanton, 12th coal
Little-common, in Brampton, 1½ m. W of Chesterfield, 8th coal (lately)
Little-Hallam, N of the village, ½ m. S of Ilkeston (formerly)
Loco-lane, 1¼ m. SE of North Winfield (formerly)
Longhurst-lane, ½ m. W of Mellor Chapel, in Glossop, 2nd coal
Longway bank (or Longnor) 1 m. N of Alderwasley, in Wirksworth, 1st coal (formerly)
Lounsley-green, 1¾ m. W NW of Chesterfield, 8th coal
Lower-Hag, 1 m. NW of Dale-Abbey (formerly)
Lower-house (or Cucko-bush hill) ¾ m. W. of New Mills, in Glossop, 2nd coal
Ludworth, near Compstal-bridge, 1½ m. NW of Mellor, in Glossop, 2nd coal, crowstone
Lumsdale, 1 m. NE of Matlock, 1st coal (lately)
Measham, N and NE of the town (formerly)
Measham-fields, 1 m. E SE of Measham
Middle Duckmanton, one-third mile N NW of Long-Duckmanton (formerly)
Miln-hay, 1 m. E NE of Heanor (formerly)
Moor-top (or Duckmanton-common) S of Calow, 2¼ m. E SE of Chesterfield, 9th coal (formerly)
Moor top (Top of Moor) near Chinley-hay, 2m. S SW of Hayfield, 2nd coal
Morley, one-third mile E of the town (formerly)
Morley-park, 1 m. S SE of Heage, 9th coal (an iron furnace and mines)
Mossborough-moor, NW of the village, 1½ m. NW of Eckington, 8th coal
Nether-Birchwood, 2 m. SE of Alfreton
Nether-field, 1 m. S SE of Beighton, 12th coal (formerly)
Newbold-common, 1¾ m. N of Chesterfield, 10th coal (formerly) now ½ m. W of this
Newbold-field, N of the house, 2½ m. NW of Chesterfield, 10th coal (formerly)
New Brampton, 1 m. W of Chesterfield, 7th and 8th coal (formerly)
Newhall, 1 m. SW of the village, in Stapenhill
Newhall-park, W of the village, 1¾ m. NW of Church Gresley (formerly)
Newton, ½ m. E, NE of Blackwell (formerly)
Norbrigs, 1¼ m. E NE of Staveley, 12th coal
Nuthall, on the S side of the park, 1 m. N NW of Bilborough, Notts. under yellow lime, 160 yards deep (formerly)
Oakerthorpe, E of the village, 1 m. SW of Alfreton, 12th coal
Oakthorpe, E of the village, two-thirds mile N of Measham [formerly]
Old-hall-wood, two-thirds mile W SW of Mellor chapel, in Glossop, 2nd coal [formerly]
Openwood-gate, two-thirds mile S SE of the houses, 1¼ m. SE of Belper, 3rd coal [formerly] crowstone
Over-thorp, ½ m. SW of Killamarsh, 12th coal [lately]
Oneston [or Ounston] SE of the village, 1½ m. SE of Dronfield, 8th coal [formerly]
Owlcotes. See *High-house*
Palterton, W of the houses, 1¼ m. SSW of Bolsover [formerly]
Pebbley-lane [Rode's] W of the inn, 1¼ m. N of Barlborough [formerly] a great fault between this and Knitaker colliery
Pentrich, ½ m. S SE of the town, 12th coal
Perkins, ½ m. E SE of Newhall [formerly]
Pilsley-lane, 1¼ m. S SE of North Winfield [formerly]
Pingle, one-third mile NW of Dale-Abbey [formerly]
Pinxton, ½ m. NE of the church, and one-third m. E SE [formerly, also S W and NW of the church]
Pistern, 1¼ m. N NW of Smisby, 1¼ m. from Hartshorn [formerly]
Plaistow green, SE of the houses, 1 m. N NE of Crich, 1st coals [formerly]
Riddings, SE of the village, 2¾ m. SE of Alfreton
Ringing-low-bar, SW of the inn, 2¼ m. NW of Dore, 2nd coal, crowstone
Ripley, SW of the village, 1½ m. S SE of Pentrich
Roby east-field, 1 m. E of Denby church [lately]
Roby west-field, ¾ m. NW of Denby church
Round-hole, 1 m. NE of Church Gresley [lately]
Salters-sitch, SW of Ouler bar, 1⅜ m. W of Holmsfield, 2nd coal [formerly] crowstone
Shallcross [or Shaweross] E of Taxhall, 2¾ m. W SW of Chapel-en-le-Frith
Shaw-hay [or Ernocroft] 1¼ m. N of Mellor, in Glossop, 2nd coal
Shipley, 1 m. S SE of Heanor, brasses, 244 yds. deep.
Shirland, ½ m. S of the town, 11th coal
Shuttlewood-common, 1½ m. N of Bolsover [formerly]
Simondley, SW of the village, 2 m. SW of Glossop, 2nd coal
Simonfield, SE of Park Hall, 1 m. SE of Smalley [formerly]
Slack-fields, ½ m. E of Horsley, 4th coal
Smalley, ½ m. N NE of the town [formerly]
Smalley-common, ¾ m. S SW of the town [formerly]
Smithy-houses NE, ½ m. NW of Denby church [formerly]
Smithy-moor, SW of Stretton, 1¾ m. N NW of Shirland, 9th coal [formerly] marley bind
Somercotes, E of the village, 2¼ m. SE of Alfreton
Somercotes-furnace [or Alfreton-furnace] SE of the village, 2½ m. SE of Alfreton, an iron furnace and mines
South Normanton, ½ m. S of the church
Spinkhill-common, E of the village, 1¼ m. NW of Barlborough, 12th coal
Stanage-pole, SW of the pole, 1½ m. N NE of Hathersage, 1st coal [formerly]
Stanfrey [or Horsecroft] E of the houses, 2¼ m. N NE of Bolsover [lately]
Stanley-common, 1 m. NW of West Hallam [formerly]
Stanton, at SE end of Stanton Ward, 1¼ m. W of Newhall
Stanton-by-Dale, or Nutbrook. See *Hallambridge*
Staveley, 1 m. SW of the town, 12th coal
Stone-gravel, ¾ m. N of Chesterfield, 9th coal; also ½ m. SW of this
Stretton, E of the village, 2 m. N NW of Shirland, 9th coal
Stubley, 1¼ m. NW of Dronfield, 8th coal [formerly]
Sudbrook [or Sudale] one-third mile S SE of Barlow, 8th coal
Sutton [in Scarsdale] ¾ m. NW of the church, 12th coal [formerly]
Sutton-common [ditto] two-thirds m. NW of the church, 10th, 11th, and 12th coals [formerly]
Swadlingcote, one-third m. NW of the village, ½ m. S SE of Newhall, smithy coal
Swanwick-delves, E SE of the houses, 1¾ m. S SE of Alfreton
Swanwick-green, 1½ m. S SW of Alfreton, brasses
Swinney, ½ m. NE of Belper bridge, 1st coal [formerly]
Tansley-green, 1¼ m. W of Matlock, 1st coal [formerly]
Tapton, ¼ m. S of the hall, NE of Chesterfield, 8th coal [formerly]

CHAP. 2.

List of Collieries.

Thatch-marsh, in Hartington, 2 m. SW of Buxton [works 2¾ m. long] 1st coal, brasses; worked by a rail-way tunnel
Thickwood, NW of Ouler Bar, 1⅜ m. W NW of Holmsfield, in Dronfield, 2nd coal [formerly]
Tibshelf, one-third m. S of the church
Ticknall, at SW end of the town [formerly]
Tor-mine, one-third m. SW of New Mills, in Glossop, 2nd coal [formerly]
Town-field, 1 m. NW of Heage, 1st coal [formerly]
Troway, S of the village, 2½ m. E SE of Eckington, 8th coal, smithy coal
Tupton-green, 1 m. NW of North Winfield, 9th coal
Water-field, E of Stanton, 1¾ m. W SW of Newhall [lately]
Westfield [or Sough] one-third m. SW of Barlborough [formerly]
West-Hallam [or Ferneyford] near Lewcotegate, 1 m. NE of West-Hallam
West-Hallam windmill-hill, ½ m. NW of the town, and also one-third m. E of it [formerly]
Wheat-croft, in Crich, NW of the village, 1st coal [formerly]
White-holly-coppy, S of the houses, 1½ m. S of Ticknall [formerly]
Whittington-moor, two-thirds m. SE of the church, 10th coal
Wigwell, NE of the houses, 1¾ m. E NE of Wirksworth, 1st coal [formerly]
Wildens-mill, two-thirds m. W NW of Brimmington, 8th coal
Wilders-green, NW of the houses, 1¼ m. W of Barlow, 7th coal [formerly]
Wingerworth-furnace, N of Woodthorp, 3 m. S of Chesterfield, 7th coal [formerly] an iron furnace and mines
Wingerworth-park, NW of the hall, 2 m. S of Chesterfield, 9th coal
Wooden-box, E of Swadlingcote, 1½ m. SE of Newhall [lately]
Wood-field [or Park-gate] one-third m. N of Newhall [formerly]
Woodhouse [or Stubley] ¾ m. SW of the village, 1¾ m. W of Dronfield, 8th coal
Woodhouse-lane, ½ m. SW of Smalley church [formerly]
Wood-nook, 1¼ m. W NW of Sutton, in Scarsdale, 9th coal [formerly]
Woodthorp, W of Tupton, 1¼ m. W NW of North Winfield, 7th and 8th coals [formerly]
Woodthorp, N of the houses, 1¾ m. E of Staveley, 12th coal [formerly]
Woodwards-close, S of Swadlingcote, 1 m. NE of Church Gresley

History and mode of working.

The discovery of coal in Derbyshire, or indeed in any part of England, and the use of it as fuel cannot accurately be traced to any particular period. There are reasons however to believe that it was partially known and consumed in the earliest era of our history. At Ashby Wolds, and other places where the coal measures basset through the red marl, there have been found rude ancient tools of flint, which apparently belonged to the aborigines of the island. In the west riding of Yorkshire there are still vestiges of beds of cinders, and in one of these Roman coins have been found. The Barwell colliery, a few miles westward of Newcastle-upon-Tyne, bears evidence of its having been worked by the Romans. But coal was not held in estimation as fuel even so late as the fourteenth century; for the burning of coal was prohibited in London in the year 1308 by the proclamation of Edward the First. In the reign of Queen Elizabeth, the burning of coal was again prohibited in London during the sitting of parliament, lest the health of the knights of the shires should suffer during their residence in the metropolis. It appears however, from a charter of Edward II. dated 1315, that the coal of this county was in use, and that the lord of Alfreton, Thomas de Chaworth, granted to the monks of Beauchief, permission to supply themselves from his domains of Norton and Alfreton.

The old coal pits or workings were upon the edge or basset, where the strata appeared immediately under the vegetable soil or thin alluvial covering. These were afterwards followed, until (as the colliers express it) the mineral had *got cover* under the yellow limestone, grit or other upper stratum; and there the beds or measures, whether coal or other mineral, are always more valuable than near their bassets, in the open works or shallow pits, to which the getting of coals seems to have been long confined. When coal became an article of general consumption, about the beginning of the seventeenth century, great researches were made for the discovery of that important mineral, and some superstitious practices necessarily were resorted to, in the then general deficiency of geological information. At

History and mode of working.

present, men have become conversant with those natural indications which direct them with tolerable certainty to the treasures hidden beneath the surface of the earth. The disruptions or faults, the vertical position of deranged and isolated strata, and other consequences of the violence to which the coats of the globe have been subjected, will occasionally induce difficulties and errors, but an acquaintance with each individual stratum, and its relation to the known coal seams, is the best, if not the only true method of discovering other coal seams, and of successfully opening and conducting collieries or coal pits.*

Coals, as well as other minerals, are obtained from pits or mines, by means of pumping-shafts, soughs or levels, which will be more particularly described in speaking of the lead mines of this county. Sinkers or shaftsmen are persons who from their youth acquire a practical knowledge of the strata in their neighbourhood, as far as regards their order and thickness. In the process of their labour, the sinkers endeavour to ascertain what beds of compact rock, coal, &c. will stand without lining, while where the shaft is carried through soft or crumbling measures, a curb or flat ring of sound oak or elm is laid on the bottom, on which stones or bricks are built to the top. The sinking is then carried on within this ring or curb as far as is judged safe, when a new curb is laid, and the wall of the shaft is supported by a pier built up from it. Where deep valleys intersect a mineral district, tunnels, soughs or water-levels have been made as the means of relieving or laying dry the mineral veins or the seams of coal. The use of steam-engines has rendered these levels less necessary, but there are some in this county which will be hereafter mentioned, and which are well worthy the attention of the traveller, on account of the skill, labour and perseverance that have been employed in their construction.

By means of a sough or level driven across the measures so as to reach

* From the inclination or bending of coal strata, they always rise near to the surface in some parts of their course, and would be visible if not covered by soil or gravel. In the intersections formed by rivulets, or by accidental fractures on the sides of hills in a district, the nature of the strata may often be determined, and should be ascertained before any expense be incurred in boring or sinking for coal. When this is done, a proper station should be chosen; which requires great judgment: otherwise it is possible to bore or sink to great depths, and miss a bed of coal which exists very near the place: this will be evident from the inspection of the two stations, *a* and *b*, (*Geolog. plate, compartm.* D) in the latter it would be impossible to meet with the bed of coal, *c*, because the search is made beyond the line where it rises to the surface, or, in the miner's language, crops out. At *a*, coal would be found after sinking only a few yards. In most situations, it is better to search for coal as deep as can be done without expensive machinery, by sinking a well in preference to boring. By sinking, a decisive knowledge of the nature and thickness of the strata can be ascertained as far as you descend, which can only be imperfectly known by boring; for the latter mode is liable to great uncertainty of result, from bendings or slips of the strata. If, for instance, the borer be worked in the situation *a*, (*Geolog. plate, compartm.* D) it will pass through a great depth of coal, which in reality may not be more than a few inches in thickness. Besides the uncertainty of the results, the grossest impositions are sometimes practised to answer interested purposes, and induce proprietors to continue the search, where there is no reasonable probability of success. Where coal strata come to the surface, they are generally in a soft decomposed state, and intermixed with earthy matter. They frequently present no appearance of coal, but the soil may be observed of a darker colour. The real quality of the coal cannot be ascertained until it is found below in its natural undecomposed state, lying between two regular strata of stone, or indurated clay. In general it is observed that the same bed improves in quality, as it sinks deeper into the earth. Coal strata are generally split or divisible into rhomboidal blocks, by vertical joints, which range about E SE and W NW: these are called slines; the oblique shorter joints are called cutters. There is more than one-third of England in which all search for valuable coal is useless: the knowledge of a negative fact becomes important, when it saves us from loss of time, expense, and disappointment.

CHAP. 2. History and mode of working.

the bottom or under side of a seam of coal, or by means of shafts sunk to the same point, the foul air is expelled. The next operation in opening a mine is to drive the water-levels in the coal, or to cut a gate or passage each way so as to let the water have a gentle fall towards the pumping shaft.—These operations are common to all collieries; but then the nature of the strata which immediately cover the coal is to be considered, and it must be determined what lengths of the banks or works can be opened at one time, and what direction such banks or faces of the works must have. In Derbyshire and its environs, coal seams having tolerably good roofs, with their water-levels ranging nearly parallel with the *slines* or the length-way joints of the coal, the pits are for the most part worked the *long way* or with long banks, which is the most economical method when it is practical, both in the expenses of working and in the produce of coal. Cross-gates or jenny-gates are then driven, which are passages not only giving admission to the pure air, but serving for different roads to the works; and the regular operations commences by a set of colliers, called *holers*, who begin in the night and hole or undermine all the bank or face of the coal, by a channel or nick from twenty to thirty inches back, and four to six inches high in front; pecking out the holeing stuff with a light and sharp tool called a pick, hack, or maundrel: and placing strutts of wood in such places where the coal seems likely to fall, in consequence of being so undermined.—When the holers have finished their operations, a new set of men, called hammer-men or drivers, enter the works. These fall, or force down, large masses of coal, by means of long and sharp iron wedges, which, being broken into smaller pieces, are placed in corves or trams and drawn to the top of the pit, by the whimsey, or horse-gin used for that purpose. The *corve* is a square shallow wooden box, having an iron handle over it in smaller works, and being slung with chains in larger works: in some places the corve contains about nine pecks, in others two hundred weight. After the day's work is completed, the portion of roof deprived of its natural support is propped up by stout posts of wood, sometimes placed at little more than a yard apart, and at other times only here and there for precaution, where joints appear in the rock above. After this, on the following day, the same operations are repeated. Where the roofs prove good the props are moved forward; and in some works cast iron supports (the invention of Mr. John Charlton) are made use of with great advantage.

The coals of Derbyshire are for the most part worked by lessees, but not above eight or nine great landowners work the pits on their own account except for their own and their neighbours' consumption. Collieries are generally let, by the acre of coals that are worked, ascertained annually by survey and measurement of the subterranean works. Mr. Farey states the rents to be from £50. to £180. per acre, according to various circumstances. Other coal owners reserve a fixed rent, which varies from 4*d.* to 16*d.* upon every ton sold at the pit.

There are many varieties of coal. The *hard* is much esteemed, particularly when it is of a bright black colour. The *soft* coal of Derbyshire do not *cake* or *crozle* together except in some instances, and then they are called *smithy coal*. This last mentioned coal is slattery and often sulphureous. It is much used for burning limestone and the manufacture of iron

goods. A large quantity of it is converted into coke. Of the former, which is by far the most valuable, the diversities will be found to be stated in the list of collieries.

History and mode of working.

MEASURES *or* STRATA *penetrated in various* COAL PITS.

Shipley deep field.

The terms in the following list are generally Provincial, and used by the Practical Miner.

Measures or Strata.

	yds.	ft.	in.
Soil and blue clay	2	1	0
Blue bind with ironstone beds	5	1	3
Black bind with good ironstone beds	1	1	9
Soft coal	0	1	6
Brown skerry stone	1	1	5
Light coloured bind with ironstone...	5	1	1
Dark bind with much ironstone	3	1	0
Grey stoney bind	1	1	0
Dark bind with some small ironstone beds	12	2	0
Black shale	0	1	0
Soft coal or smut	0	2	10
Dark clunch, the upper part very hard	1	1	0
Light bind full of small ironstone balls	1	2	9
Black shale	7	0	0
Ironstone bed	0	0	5
Light coloured bind or shale	0	1	1
Soft coal	0	2	0
Light coloured clod or dun	0	0	6
Soft coal	0	1	10
Light coloured clod or dun	0	0	4
Soft coal	0	1	2
Roof coal	0	1	2
Shipley hard coal	0	2	6
Soft coal	0	2	6
Light coloured stoney clunch	3	1	6
Brown rock stone, or the Shipley quarry stone	4	0	0
Grey stoney bind with ironstone beds	10	1	6
Minge coal, formerly called the old-greaves coal	1	0	0
Dark clunch	1	1	0
Strong grey stone	1	2	6
Dark bind with ironstone	3	1	6
Black shale	0	1	6
Dark stoney bind with ironstone	6	2	6
Soft coal	0	1	6
Light coloured soft clunch	0	1	2
Blue bind full of small ironstone	7	2	10
Soft coal	0	0	9
Grey stoney clunch	9	1	3
Oldgreaves or staterloo coal	1	0	8
Clunch	1	0	3
Strong dark bind with ironstone	4	1	3
Blue bind full of good ironstone	0	1	6
Soft coal	0	1	6
Light coloured soft clunch	0	1	4
Hard grey stone	1	2	8
Dark bind with ironstone beds	5	2	0
Black shale	0	0	3
Soft coal	0	2	0
Light coloured clunch	1	0	6
Grey stone	2	2	6
Grey stoney bind with ironstone	7	0	3
Blue bind with ironstone	2	1	9
Soft coal	0	1	4
Light coloured clunch	1	1	4
Hard grey stone	2	1	8
Dark stoney bind with ironstone	8	2	3
Blue bind with ironstone	1	0	9
Shale and coal mingled	1	0	0
Light coloured bind with ironstone...	1	0	4
Dark stoney bind	13	1	2
Cannel coal	0	2	0
Dark clunch	3	0	9
Grey stone	1	0	0
Dark bind with much ironstone	25	1	6
Dark stone called muscle bed	0	0	6
Black shale	0	1	4
Blue bind	2	0	0
Soft coal	0	1	4
Dark clunch	0	2	0
Grey strong bind with ironstone	4	0	0
Hard black stone called crowstone	0	1	0
Black shale	1	0	0
Dark stoney bind	9	0	0
Shale and coal, or coal mingled with shale	1	0	0
Light coloured rock stone	9	1	0
Grey bind	3	0	0
Bright soft coal	1	1	3
Black clod or dun	1	1	9
Bright soft coal	1	1	3
Bat and shale	1	0	0
White clunch	2	0	3
Dark strong bind	3	1	0
Soft coal called the foot coal	0	0	9
Dark bind	8	0	3
Strong jay or roof coal	0	0	10
Scud or ming coal	0	0	8
Main hard coal	1	0	0
Soft coal	0	1	0
	244	1	3

West-Hallam.

	yds.	ft.	in.
Soil and clay	2	1	6
Bind or hard clay	16	0	0
Smut or soft coal	0	1	6
Clunch harder than bind, and full of ironstone balls, with roots running through it	1	1	0
Bind	1	0	0
Clay-stone	0	1	0
Bind	6	0	0
Black shale	0	2	0
Bind	4	0	0
Burning shale	1	0	0
Hard grey clay with a bed of cank, a substance as hard as flint	18	0	0
Soft coal	1	1	0
Black dun, an earthy coal	0	0	6
Soft coal	1	1	6
Clunch and bind	7	0	0
Coal	0	1	0
Broad bind	8	2	0
Hard coal	2	0	0
	72	1	0

Measures or Strata.

Ilkeston.

	yds.	ft.	in.
Soil and yellow clay	2	0	6
Black shale	1	1	0
Ironstone	0	1	6
Coal	0	1	3
Clunch	2	0	6
Grey stone	3	0	0
Blue stone	2	1	0
Black shale	0	1	6
Brown ironstone	0	1	0
Black shale	2	0	0
Light blue bind	2	0	6
Burning shale	0	2	6
Light blue clunch	1	1	0
Light blue stone	3	0	0
Blue bind	0	2	3
Coal	0	1	6
Black clunch	0	0	4
Black jay, a sort of cannel coal	0	0	9
Lightish blue clunch	0	2	5
Broad bind	2	1	6
Light coloured stone	1	1	0
Greyish blue cank	2	0	6
Very light coloured stone	4	2	0
Strong broad bind	1	1	0
Grey stone	2	1	0
Blue bind	1	1	0
Soft coal	0	2	6
Black bind	2	0	6
Soft coal	1	1	0
Black clunch	1	0	0
Light coloured clunch	1	0	0
Broad bind	3	2	6
Coal	0	0	0
Black clunch	1	0	0
Clunch and bind	8	1	6
Hard coal	2	0	3
Clunch	1	0	9
	63	0	6

Alfreton Common.

	yds.	ft.	in.
Soil and clay	2	1	0
Skerry, or shattery stone	3	0	0
Bind	4	1	4
Blueish stone	2	0	0
Bind	11	0	8
Blackish stone	1	2	0
Bind	0	2	0
Blue stone	0	2	0
Bind	3	1	0
Coal	0	1	6
Stone bind	12	1	0
Tender bind	2	1	0
Soft coal	1	0	0
Bind	1	0	0
Tender stone	6	2	0
Bind	5	1	0
Hard coal	2	1	4
	60	2	10

Pinxton.

	yds.	ft.	in.
Earth and clay	2	1	6
Stone	5	1	0
Blue bind, very kind	3	1	0
Dark coloured bind	2	2	6
Strong blue bind	4	0	4
Grey stone	1	0	10
Light coloured bind with ironstone shreds	6	1	2
Dark coloured stone	0	2	1
Blue bind, very kind	2	2	0
Strong black stone	0	1	10
Hunch	0	1	8
Stone	0	1	6
Smut	0	0	3
Dark coloured bind with strong ironstone	0	1	3
Dark coloured shale somewhat resembling smut	0	2	0
Hard stone	2	0	5
	34	0	4

Pinxton Church.

	yds.	ft.	in.
Soil and clay	2	0	5
Black shale with coal shreds in it	1	0	4
Blue bind	0	1	6
Stone	0	2	0
Short crumbling stone	0	2	0
Blue bind	2	1	0
Black stone shale intermixed with coal	0	2	2
Clunch containing ironstone balls	1	0	6
Very kind bind containing stripes of coal	1	2	0
Grey shaley stone with shreds of black striped stone	0	2	0
Black striped stone	0	2	4
Yellow gritty stone	1	1	0
Gritstone of a binding nature	3	0	9
Cank	1	0	3
Grey stone with many coal stripes, good gets	3	0	1
Strong bind	1	2	6
Smut	1	0	0
Hard coal	1	2	10
	25	2	8

Stubley, in the parish of Dronfield.

	yds.	ft.	in.
Gritstone	30	0	0
Blue bind	11	0	0
Black shale	7	0	0
Coal	1	0	0
Dirt	0	1	6
Coal	0	2	0
	50	0	6

Adelphi works, *Chesterfield.*

The general inclination about eight degrees to the east.

	yds.	ft.	in.
Clay			
Ironstone in irregular shaped nodules *(Scrin)*	0	0	1
Clay			
Calcarious clay, composed of multifarious concentric ramified cones *(Bears)*	0	0	6
Ironstone, a bed abounding with petrified muscle shells, conchyliolithus myæ ovalis of martin *(Dogtooth)*	0	0	5
Clay			
Ironstone, in cheese shaped nodules, containing septariæ of carbonate of iron *(Old man)*	0	0	4
Clay			
Ironstone, in finger shaped nodules, consisting of concentric laminæ *(Gingerbread)*	0	0	3
Clay			
Ironstone, a bed *(White measure)*	0	0	2
Clay			
Ironstone, a bed *(Bottom measure)*	0	0	2½
Clay *(Coal smut)*			
Coal *(First coal)*			
Clay			
Coal *(Old Hobbery)*	1	2	0
Clay *(Bind)*	15	0	0
Coal *(Third coal)*	1	0	0
Clay *(Bind)*	40	0	0
Coal *(Fourth coal)*	1	0	0
	59	0	11½

The general inclination about eighteen degrees to the east.

	yds.	ft.	in.
Clay			
Coal *(Fifth coal)*	1	0	0
Clay of blueish grey colour *(Bind)*	100	0	0
Coal *(Sixth coal)*	1	0	0
Clay	10	0	0
Coal, which bassets out at Calow *(Seventh coal)*	1	0	0
	113	0	0

Hady, *east of Chesterfield.*

The general inclination about eight degrees to the west.

	yds.	ft.	in.
Clay	11	0	0
Ironstone, in angular nodules *(Scrin)*	0	0	1½
Clay	0	1	6
Ironstone, in cheese-shaped nodules, containing septariæ of carbonate of iron *(Cheeses)*	0	0	3
Conic clay, composed of multifarious concentric ramified cones; containing on analysis, iron 11 0. Carbonate of lime 78, 5. Silex 2, 5. Manganese 8 0. in 100 parts *(Bears)*	0	0	3
Ironstone, abounding with petrified muscle shells, contains 25 per cent. of iron *(Muscle band)*	0	0	3
Clay	0	1	6
Ironstone, in cheese-shaped nodules, containing septariæ of carbonate of iron *(Old man)*	0	0	4
Clay	0	1	3
Ironstone, in cheese-shaped nodules, containing septariæ of carbonate of iron *(Old woman)*	0	0	4
Clay	0	0	9
Ironstone, in ovate nodules, containing vegetable impressions *(White balls)*	0	0	4
Clay	0	1	6
Ironstone in lenticular nodules, containing septariæ *(Dices)*	0	0	1
Clay	0	1	9
Ironstone in nodules, two beds *(Balls)*	0	0	6
Clay	0	1	6
Ironstone in lenticular nodules *(Smooth chitters)*	0	0	3
Clay	0	0	6
Ironstone in lenticular nodules *(Rough balls)*	0	0	3
Clay	0	2	6
Ironstone in beds *(Flamper)*	0	0	6
Clay	0	2	2
Ironstone in beds, containing sulphur of lead in small fissures *(Scrin black)*	0	0	3
Clay	0	2	0
Ironstone, abounding with petrified plants *(Black measures)*	0	0	3
Clay	0	1	6
Ironstone in beds *(Dunstone)*	0	0	6
Clay	0	1	6
Ironstone in nodules, containing petrified bivalve shells, with crystals of sulphur of lead, &c.	0	0	4
Clay	0	1	6
Ironstone in lenticular nodules, containing pisolites *(Balls)*	0	0	5
Clay	0	1	6
Ironstone, in ovate nodules, containing vegetable impressions *(Black measures)*	0	0	4
Clay	0	1	6
Ironstone in angular nodules *(Over bottom)*	0	0	4
Clay	0	1	6
Ironstone of black colour *(Blackstone lining)*	0	0	6
Clay	0	1	5
Ironstone *(Lining)*	0	0	3
Clay	0	1	6
Ironstone in ovate nodules, containing impressions of vegetables *(Nether bottom)*	0	0	4
Clay *(Bind)*	0	2	5
Coal *(Main coal)*	0	2	2
Ferruginous clay, with oval nodules of ironstone, containing vegetable impressions, as ferns, &c.	11	0	0
Coal *(Underbed)*	0	2	0
Black soil *(Smut)*	0	2	6
Soft coal	0	2	0
	37	1	10½

CHAP. 2.

Damps.

Coal works are subject to two very considerable evils: these are, what the workmen term, *fire damp* and *choak damp.** The former is a gas chiefly composed of hydrogen, which often issues in streams from the cracks and joints in coal and shale strata, and by its lightness occupies the tops of gates or hollows. In such situations it becomes mixed with the atmospheric air and is liable to explode, not only with serious injury to the miners, but, when the quantity is considerable, it occasions extensive devastation with loss of lives. The latter settles at the bottom of shafts, where there is no circulation of air, and often proves fatal to animal life, by suffocation. When the hydrogen gas is accidentally set on fire, the men throw themselves on their faces, on the ground, to avoid the return of the blast, as there is more danger to be apprehended from the vacuum formed by the total consumption of the inflammable gas, than from the effect which the fire has upon them. It seldom happens after the explosion that the men are much burnt; they suffer more after an explosion of the fire damp from the after damp, or carbonic acid gas, which is the produce of this explosion, and fills up the vacuum occasioned by it. After an accident of this kind, it is considered dangerous to enter the pit for some days, on which account it is to be feared, many lives are lost, which might have been saved by immediate assistance.

With respect to the nature of the coal of Derbyshire, we extract the following results from Mr. Mushet's experiments:

Nature of Derbyshire Coal.

	Volatile matter.	*Charcoal.*	*Ashes.*	*Specific gr. of coal.*	*Specific gr. of coke.*
Alfreton coal contains . .	45·50	52·456	2·044	1·235	less than 1
Butterly	42·83	52·882	4·288	1·264	1·1
Derbyshire cannel	47·00	48·362	4·638	1·278	

Gritstone and Shale.

Gritstone and shale. These strata, although they possess many of the characteristics of coal measures, with numerous vegetable impressions, which are not met with in the lower strata, nor in any stratum covering the red marl. The gritstone and shale contain, however, no seams of coal of the least value.

First Grit Rock.

The *First grit rock,* or *Millstone grit rock,* composes a very considerable part of the silicious rock scenery of this county. In several places it has been proved to be 120 yards thick, composed chiefly of a very coarse-grained white freestone, sometimes inclined to a yellow and sometimes to a red colour. As it is easily worked, notwithstanding the extreme hardness of its particles, it may be regarded as equal, if not superior to any of the freestones in England. The *Peak-millstones,* which are celebrated all over the kingdom, are made from this stratum. These millstones are made at many places to the north of Belper, but chiefly at Old Booth Edge,

* "Coal mines, it is well known, are subject to fatal explosions of what is called the fire damp, or carburetted hydrogen gas. This gas appears to be generated by the decomposition of iron pyrites in coal, and may be often heard issuing from the fissures in a coal bed with a bubbling noise, as it forces the water out along with it. The choke damp, as it is called, is either carbonic acid gas (fixed air) or the unrespirable residue of air left after explosions when all the oxygen is consumed." *(Bakewell's Introd.)* Mr. Bakewell is of opinion that the number of lives destroyed by explosions in coal mines has increased since the introduction of the safety-lamp—"from causes which do not invalidate the value of the discovery, if its use were confined within the limits which its illustrious inventor must have proposed." *(Ibid. Appendix.)*

First Grit Rock.

and in the neighbourhood of Hathersage, where by long working, a very superior part of the stratum has been discovered. In truth, fine blocks of this rock, of every size that can be required, are so plentifully met with, loose and above ground, that there are few excavations which deserve the name of a quarry, except at Hathersage.—The millstones made at Old Booth Edge are from 2 feet 3 inches diameter and 8 inches in thickness, to 5 feet 7½ inches diameter and 17 inches in thickness. These stones vary in price from eight pounds to sixteen and twenty pounds per pair. Stones little inferior to those made at Old Booth Edge are also made at Alderwasley, Bamford-edge, Curbar and Eyam; also, at Harston in Matlock, at Kinder-scout, east of Hayfield, and at Lea in Ashover. There are found in the beds of grit rock, strata of a light red colour which are perfectly infusible, and form excellent *fire stone*. The best are those which are obtained in Roches quarry at Ashover; but good firestones are met with in other parts of the county.

This stratum, as being the lowest grit rock, is very important in a geological point of view. Its basset-edge can be traced with facility through the county. This commences at Little Eaton, and proceeds past Duffield-bank, and crosses the Derwent at Milford. It is then to be traced to the Chevin hills, the stone houses near Cromford, Watstanwell-bridge, and Toadmoor-bridge, where it again crosses the Derwent. The following are the names of places through or near which this important basset passes. Ridgeway, then to the east of Bull-bridge, east of Fritchley, to the west of Park-lane head, the east of Plaiston green, Wakebridge, Upper Holloway, to the west of Lea, Harston hill, Riber hill, Tansley, Lumsdale, Matlock-bank, Over Hackney, Toadhole mills, Stonecliff, Little Rowsley, Fallange, to the east of Beeley hill top, and Chatsworth house, then to the west of the Robin Hood in Baslow, on both sides of Barbrook dale, to the east of Curbar, Froggat, Toadhole, Nether Padley; on both sides of Burbadge dale, to the east of Upper Padley, Booth, Upper Burbadge bridge, to the north of Hathersage, Cupola, Stanage; to the north-east of Bamford, to the east of Derwent chapel, Lost Lad hill, High stones, Crowstones, Horse stones, Dean Head stones, Barrow stones, Grinah stones, Blakelow stones, Wain stones, Shelf stones,* Glossop low, Glead hill; to the east of Carmeadow, Whimbury knots, South Head Tor; to the south of Chinley head and churn, to the west of Chapel-en-le-Frith, Tunstead lane, Thorney ley, Thatch marsh, and the north and south Axe-edge hills, where the grit-stone basset leaves this county and enters Staffordshire.

Great Shale or Schistus.

The *great shale or schistus*. This stratum is sometimes called limestone shale: its thickness has been proved, by the shafts of the lead mines, in the limestone beneath it, to be from 150 to 170 yards, consisting sometimes of black or brown shale in very thin laminæ. This stratum is subject to great and curious anomalies, the first and most general of which are accidental beds of fine-grained silicious freestone, very full of mica in minute plates, and stained with various concentric rings of different shapes and shades of yellow and red. Of this very beautiful and perfect freestone, Chatsworth house, Buxton crescent, and the Moot hall at Wirksworth

* See the Great Alpine Ridge, page 6.

CHAP. 2. Great Shale or Schistus.

are built.* At Stoney Lee near Yolgrave, there is a cliff of coarse shale, that might be mistaken for gritstone rock, and similar characteristics in this stratum are discernible at Hartle moor and Kirk Ireton. The shale limestone appears occasionally in this stratum, in large masses of a blue and sometimes of a deep black tint. The celebrated black marble quarries belong to this formation. Ironstone† is found in considerable beds in the limestone shale, and some large balls of it may be seen in the front of the slips which have happened in Mam-Tor, Castleton; at the White Tor, Lea; near Cromford and other places.—In several places, bassets of thin accidental coal measures are sometimes perceptible, which have too frequently induced expensive trials by boring and sinking, but which have always terminated in disappointment. Several ochrey and chalybeate springs‡ issue from the great shale, and sulphur, in small quantities, is found in its cavities.

The extent of surface, occupied by the gritstone rock and the great shale in this county, has been computed by Mr. Farey to contain about 160,500 acres.

Mineral Limestone.

Mineral limestone and toadstone strata. These most important strata are six in number. Three of them are limestone rocks, and three are basaltic§ beds or strata, denominated in Derbyshire, toadstone. The first limestone, the uppermost of the series, bassets regularly from under the shale, all the way from Ranter mine, N NE of Wirksworth, south, to near Quarters house, N NW of Great Hucklow, north. This basset runs in an irregular line, through Cromford, Matlock, Snitterton, Wensley, Winster, Elton, Middleton by Yolgrave, Yolgrave, Alport, Stanton in the Peak, Haddon hall, Bakewell, Rowsdale, Sheldon, Ashford, Little and Great

* "Bakewell church is built of this stone from Bakewell edge, from whence the fronts of Chatsworth house were built, and the principal part of the crescent at Buxton; though the same stratum bassets out on the spot, a circumstance at that time not known." *White Watson's Delineation*, page 27.

† "Nodules of ironstone, called shale binds, also occur stratified, some of which contain septariæ of carbonate of iron, which are hollow and contain liquid petroleum (also called Barbadoes tar, and is used by the miners for fresh wounds, and as a substitute for candles) and asphaltum, with crystals of sulphate of baryte, carbonate of lime, sulphate of lime, sulphuret of iron, &c. Other nodules are formed in concentric laminæ and called geodes, and others are botryoidal balls of calciform iron ore. Black asphaltum sometimes occurs of very compact texture and shining fracture in thin beds." Ibid.

‡ From a spring in this stratum, the town of Bakewell takes its rise and name.

§ "Imbedded interstratified basalt or trap is sometimes found alternating with rock of undoubted marine origin. In Derbyshire there are three beds of basaltic amygdaloid separated by thick beds of transition limestone. Mr. Westgarth Foster has described an enormous bed of basalt in Northumberland and Durham, called the great Whinstone-sill, placed between regular strata of limestone and gritstone; this bed varies in thickness from 12 to 60 yards. Other instances might be cited of basaltic beds interposed between regular strata, but frequently the strata are broken and disturbed in the vicinity of the basaltic beds. .....

.....The beds of Derbyshire toadstone, and the great Whinstone-sill in Northumberland and Durham, may have been formed by repeated eruptions of lava over the bed of the ocean; or, what is less probable, they may have been intruded long after the formation of the strata, with which they are at present associated. .....It has been generally believed, that the veins of lead ore in Derbyshire, which pass through the beds of limestone, are entirely cut off by the toadstone; and if this could be proved, it would favour the opinion, that the beds of toadstone had been intruded between the beds of limestone, after the formation of the metallic veins. In some instances, however, the veins of lead ore do pass into the toadstone and are rich in ore. It is now even doubted whether all the veins do not pass through the beds of toadstone, though they become very narrow, or yield no ore when in the latter rock. The information which I could collect from the most intelligent miners, when I was last in that county, still leaves the question undecided." *Bakewell's Geology*, Chap. IX.

Mineral Limestone.

Longsdon, Hassop, Calver, Stoney-Middleton, Eyam and Foolow. The remaining part of this boundary is to be traced along the great limestone fault.

On the western boundary of these strata may be seen the basset-edge of the third or lowest toadstone, with the fourth lime rock rising from under it: indeed, each of the three limestone rocks has its regular but crooked range and basset-edge from south to north. The *first* limestone may be traced from Wirksworth to the north of Great Hucklow, abutting at each end against the great limestone fault. The *second* from Middleton wood near Wirksworth, and the *third* from between Wirksworth and Hopton to Hucklow and Castleton. The toadstone strata may be found in nearly the same range. Many points in this range may be traced by referring to the list of hills and valleys given at pages 6 and 11, and in the list of lead mines. The phenomena of isolated patches of these strata, detached from the range or basset of them, are to be attributed to two distinct causes. These isolated patches may be either remaining portions of strata which have been partially carried away, or they may be denuded portions of the under strata.

In the strata now under consideration, and occasionally but very seldom, in the strata immediately above or below them, there are found great numbers of mineral veins.

Veins of Lead Ore

Veins of lead ore are distinguished on account of their various positions in the earth, by the different names of *pipe*, *rake*, and *flat* works. *Pipe-works* lie between two rocks, or strata, yet seldom follow any regular inclination, but fill up fissures, the lines or branches running parallel to each other, and more or less horizontally. The branches have a general connexion or communication by means of fine slender threads, or *leadings*, as the miners term them. The rock which forms the *roofs* and *soles* of these veins, is sometimes pierced through by the leadings, which frequently conduct to a fresh range. These works are always attended with a considerable portion of clay; and when the branches of the vein become imperceptible, the clay is often followed as a sure guide to new veins. The principal pipe veins are Yate Stoop, near Winster; Hubberdale, near Monyash; Watergrove, Millermine, Lanehead, at Castleton, and Bacchus or Crich cliff. The veins are sometimes twenty or thirty yards wide, and sometimes not more than two inches: they most commonly have toadstone in the vicinity, either above or below.

Rake.

Rake, or perpendicular veins, are found in the clefts and chasms of the limestone; and consequently, instead of extending uniformly between the same strata, they follow the direction of the cavities, and sometimes penetrate 150 or 200 yards into the earth. "Near Castleton, they generally run from east to west, and are traced, or discovered, from the surface. They are not exactly perpendicular, but *hade*, or incline about one foot in ten; sometimes to the north, and sometimes to the south. There are veins that have a more northerly or southerly direction, and are then called *cross veins*: sometimes they intersect each other, and where they unite, they are generally very rich. Small veins, usually called *strings*, or *scrins*, often extend from the rake, and take various directions: all are worked as long as they are found profitable, and the intermediate substances that divide

CHAP. 2. Rake.

them are called *rythers*. When the veins are separated, which is sometimes the case, by *clay*, *bind*, or *toadstone*, they are observed, where the lower parts are again discovered, to be thrown on one side, according to the *hade* of the vein, and are thence said to *leap*. The principal rake veins are in the neighbourhood of Castleton, Wirksworth, Cromford, Matlock, Winster, and a few other places."

Flat-works.

The *Flat-works* bear a great resemblance to the pipe; yet disagree in some circumstances. The principal leader, or stem, in the pipe, is accompanied with many branches, but the flat has none; the latter spreads wider, yet seldom extends more than 100 yards. It is also found near the surface, and in the solid rock. The miners are divided in opinion, whether the pipe or the rake veins are most prevalent.

The greatest impediment to working the mines are foul air, and water. To relieve them from the first, a pipe or tube is generally introduced down the shaft, and extended along the roof of the gallery to the place where the work is carried on. To remove the water, many *adits*, or, as they are here termed, *soughs*, have been driven from the bottom of some neighbouring valley, and made to communicate with various works by different channels, or *galleries*. The longest adit in Derbyshire is at Yolgrave, running from the Derwent to Alport, and called the *Hillcarr sough*. This cost upwards of £50,000. It relieves a considerable number of mines, and is nearly four miles in length. Another, and one of the most considerable, at Wirksworth, is called *Cromford sough*. This is full two miles in length, and was driven at an expense of £30,000. The proprietors receive a certain proportion of lead ore from the mines; though the latter are now beneath the level, and of course but ineffectually drained by it. The relieving of the mines at Wirksworth by this adit, is, indeed, at this period, only a secondary object; as the water delivered by it at Cromford has proved of amazing value. The late Sir R. Arkwright employed the stream to work his cotton mill; and it is still applied to a similar purpose, having the great advantage of not being liable either to considerable increase or diminution. It is also afterwards used for the supply of the Cromford canal, to which it has been of great service, as the water, from its warm temperature, checks the power of the frost, and renders the canal navigable when others are fast bound. Another *sough*, driven from the level of the Derwent, at a very great expense, is called *Wirksworth Moor sough:* it lies to the east of that town, and is nearly three miles in length. It has been observed, that a low level in the limestone drains a large tract of country, all the waters falling into it for a considerable distance.

Hillcarr Sough.

Cromford Sough.

Wirksworth Moor Sough.

Rights of Miners in the King's-field.

The regulations respecting the rights of miners, and the dues payable for the ore, in different parts of the mining district, are numerous and various. The principal tract containing lead is called the *King's-field:* under this denomination the whole wapentake of Wirksworth is comprised, as well as part of the High Peak. The mineral duties of King's-field have been from time immemorial let on lease: the present farmer of those in the High Peak is the Duke of Devonshire; and of those in the wapentake of Wirksworth, Richard Arkwright, esq. They have each a steward and barmaster, and deputy-barmasters in the districts they hold of the crown. The steward presides as judge in the Barmote courts, and, with twenty-

four jurymen, determines all disputes that may arise from the working of mines. The courts are held twice a year; those of the High Peak, at Monyash; and those of the wapentake, at Wirksworth.* The principal duty of the barmaster is putting miners in possession of the veins they have discovered, and collecting the proportions of ore due to the lessees of the crown just named. When a miner has found a new vein of ore in the King's-field, provided it be not in an orchard, garden, highroad, or churchyard, he may obtain an exclusive title to it, on application to the barmaster. The method of giving possession, is, in the presence of two jurymen, marking out in a pipe, or rake-work, two *meers* of ground, each containing twenty-nine yards; and in a flat work, fourteen yards square. If a miner, however, neglects to avail himself of his discovery beyond a limited time, he may be deprived of the vein of which he has received possession, and the barmaster may dispose of it to another adventurer. The other parts of the barmaster's office is to superintend the measurement of the ore, and receive the dues of the lessee of the crown. In general, a *thirteenth* of the ore is the due in the King's-field; but the proportion taken is seldom more than a twenty-fifth. There is also a due for tithe;† and another, called *cope;* but the latter is paid by the buyer of the ore. The dish, or *hoppet*,

Rights of Miners.

* *The following list of the Lessees of mineral duties in the wapentake of Wirksworth will be interesting to many readers.*

Lessees of Mineral Duties.

Temp. 8th Edw. IV. Richard Earl of Warwick, John Earl of Northumberland, and others, lessees of all the mines north of the Trent for 40 years.
Temp. Elizabeth Warren and Skelton.
6th James I. Gilbert Earl of Shrewsbury.
21st James I. Robert Parker, lessee for 31 years, at £72. rent. £1..6..8. for Barmaster.
7th Charles I. Lee and Neville.
9th Charles I. Renewal to Davenport.
7th Charles I. Lease to David Ramsay for 31 years.
Char. II. Edward Vernon, lessee for 7 years, at £144. for Lot and Cope, and 53*s.* 4*d.* for office of Barmaster.
George II. ——— Rolls, Esq. May 9, 1753.
Geo. III. Richard Arkwright, esq. in 1809 or about 1810, purchased the remainder of Roll's Lease, and has since got it renewed.
The Devonshire family have long been lessees of the mines in the hundred of High Peak.

† By an agreement made August 10, 1778, between the Rev. Richard Tillard, Vicar of Wirksworth, and the proprietors of the mines within that parish, it appears that the Vicar consented to take "one fortieth part of all ore to be got and raised within the said parish in full of his tithe ore, reserving nevertheless to the said Richard Tillard, the tenth dish of ore on every new freeing."

In the time of James I. the Vicar of Wirksworth was decreed to be entitled to every tenth dish, on paying a penny to the miners for dressing it, which continued to be the uninterrupted custom until the 18th of James I. when it was denied. But was confirmed by decree in Chancery, Michaelmas term, 20th of James I. after two trials at bar in common pleas, hearing before privy council, &c.

John Gell, esq. of Hopton, laid also a decree against miners in the parishes of Bakewell, Tideswell, and Hope, for custom tithe, which was confirmed May 27, in the 3rd of Charles I.

In the 21st of James I. Feb. 19, the Derbyshire miners proposed a bill in parliament to abolish tithe of lead ore in that county, which bill was twice read, committed, and reported, but on May 12th following it was thrown out of the house of commons.

The Wirksworth miners submitted to a decree of the 20th of James I. for five years, and then questioned it. Whereon by consent, and to conclude all suits, &c. the Rev. Richard Carryer, Vicar of Wirksworth, in the 4th of Charles I. exhibited another bill, which was to include and conclude all the miners then and thereafter to be ——— when after answer and rejoinder. — Issue joined. — Witnesses examined in the country, &c. &c. Lord Keeper, Sir Thomas Coventry, on Saturday, July 4, in the 5th of Charles I. decreed in favour of the said Vicar, as to the tenth dish, and the custom of 1*d.* a dish, &c. but as he thought it too little, he did take further consideration thereof, and yet without prejudice to the Vicar or custom, &c.

CHAP. 2. as it is sometimes termed, by which the ore is measured, contains, in the High Peak, sixteen pints; in the Low Peak, only fourteen.*

Origin of the Laws.

The origin of the mineral laws of Derbyshire is unknown; but it appears, from historical records, that Edward the First directed the sheriff of the county to call a meeting, at Ashbourn, of such persons as were best acquainted with the rights and customs of the mines. On this occasion, the miners petitioned that their privileges should be confirmed under the Great Seal, as an act of charity to reserve them from the danger to which they were exposed. In the reigns of Edward the Sixth and Queen Mary, several alterations were made in the mineral laws; and within the last twenty years various new regulations have been approved, and passed into laws, at the great Barmote courts of the High Peak and wapentake.

Sorts of Ore.

The ore of lead is divided into four denominations, according to its quality. The largest, and best sort, is called *bing;* the next in size, and equal in quality, is named *pesey;* the third is *smitham,* which passes through the sieve in washing; the fourth, which is caught by a very slow stream of water, and is as fine as flour, is termed *belland:* it is inferior to all the others, on account of the admixture of foreign particles. All the ore, as it is raised from the mine, is beaten into pieces, and washed before it is sold: this part of the business is performed by women, who earn about tenpence or a shilling per day.

Smelting Furnaces.

When the ore is properly cleansed and dressed, it is conveyed to the smelting furnaces. These formerly were of two kinds, the hearth, and cupola; but the latter is now generally prevalent. The hearth furnace consisted of large rough stones, placed so as to form an oblong cavity, about two feet wide and deep, and fourteen long, into which the fuel and ore were put in alternate layers; the heat being raised by means of a large pair of bellows, worked by a water-wheel: the fuel, wood and coal. The lead obtained by this process was very pure, soft, and ductile; but as a considerable quantity of metal remained in the slags, these were again smelted in a more intense fire made with coke: the lead produced by this means was inferior in quality to the former. The cupola furnace was introduced into Derbyshire about 105 years ago, by a physician named Wright. It is of an oblong form, somewhat resembling a long, but not very deep chest, the top and bottom of which are a little concave. The fire being placed at one end, and a chimney at the other, the flame is drawn through the furnace, in which about 1800 weight of ore is strewed at one time, and thus smelted by the reverberation of the heat, without ever coming in contact with the fuel. The time required for this process is indeterminate, as some ores may be worked in six hours; but others require seven, eight, or nine, according to the nature of the substances that are attached to them. The ore which is united with spar is the most easily fused; and not un-

* The brazen dish by which the measures of ore in the Low Peak are regulated, has the following inscription. "This Dishe was made the iiij day of October the iiij yere of the Reigne of Kyng Henry the VIII before George Erle of Shrowesbury Steward of the Kyngs most Honourable household and also Steward of all the honour of Tutbery by the assent and Consent aswele of all the Mynours as of all the Brenners within and Adioynyng the lordshyp of Wyrkysworth percell of the said honour. This Dishe to Remayne In the Moote hall at Wyrkysworth hangyng by a Cheyne So as the Merchauntes or mynours may have resorte to the same at all tymes to make the trw mesure after the same."

The Miner's Standard Dish in the Moot Hall at Wirksworth.

CHAP. 2. Smelting Furnaces.

frequently a small quantity of this mineral is thrown into the furnace to accelerate the process. When the flame is applied to the ore, great care is taken that it may not be intense, as a strong heat occasions the lead to fly off with the sulphur.

The lead, when smelted, is poured into moulds of various sizes, according to the different markets for which it is intended; Hull, Bawtry, or London. Two blocks make a pig; and eight of these a *fodder*. A considerable quantity of this metal is converted into red lead in different parts of the county. This process is performed in a kind of oven, the floor of which is divided into three parts: the lead is placed in the middle division, and the fire in the spaces on each side. The flames being reverberated on the metal, convert it into a calx, or powder; which, on being a second time exposed to the action of the fire, acquires a red colour. Great care is requisite in the due regulation of the heat, particularly in the former part of the operation.

Annual Produce.

The annual produce of lead from the Derbyshire mines cannot be exactly ascertained, but may be estimated at an average of between 5000 and 6000 tons. The trade of late years has been generally thought on the decline, as the increase of depth renders the mines more difficult to be worked, as well as more expensive; yet, from the improvements that have been made in the art of smelting, and the more effectual methods employed to relieve the mines of water, by the driving of new levels, and the erection of some improved fire-engines and other machinery, advantages have been obtained, which, to a certain extent, counterbalance the augmented expenses.

In addition to the preceding account of the lead works, which has been altered and improved for our use by a gentleman of great experience in mining affairs, from what he regards as an explicit and generally correct statement given in the "Beauties of England and Wales," we shall venture to draw up a short abstract from our own notes and observations.——The mines of Derbyshire produce galina, sulphuret of lead or blue lead ore crystallized in cubes; but square and hexagonal pyramids, and other forms of lead ore sometimes occur. The white lead ore of Derbyshire is comparatively a modern discovery: for centuries it was regarded as a useless spar, and either left in the mines or buried in the hillocks, from which considerable quantities of white ore have since been extracted. It is a carbonate of lead, and is sometimes called wheatstone.—The mines in Brassington, Great Hucklow, Tideswell, and Winster, produce a *green ore* of lead, but the *yellow ores*, although noticed by Mr. Mawe, are not of common occurrence in Derbyshire.—There are very few, if indeed any, mineral veins in this county, that can be said to be of modern discovery. All veins have a communication with the surface in some part of their course, where they were in old times known and wrought, according to the common expression of the miners, *by the old men*. To encourage the search for ore, laws were framed, which conferred upon the miners peculiar privileges, of which we shall shortly have occasion to speak, and respecting which we have given some curious documents in the appendix (9). Under the sanction of these laws, which authorised any enterprising man to remove the soil and to commence his researches, even upon the land of his neighbour, very extensive discoveries were made. The veins of mineral ore were traced

through the upper limestone rock, until they were lost under the cover of the shale. There it has belonged more particularly to modern miners, aided by the improvements in machinery and science to pursue them, and to avail themselves of the increasing width and richness of the veins which repay them beneath the shale. It must not be understood that lead mines were not carried to considerable extent by the ancients, but many of those which have recently become the most productive, were left unworked for want of the means of penetrating into their widest and wealthiest cavities. In more modern periods, the veins of the lower limestone rocks, including even the fourth, have been traced from the naked surfaces of the limestone under the toadstone, which covers each of these rocks respectively.

Veins of Lead Ore.

The lead ore so abundant in this county must have held a distinguished character among the natural products of Britain, in the earliest ages, and was undoubtedly one of the principal objects that induced the commercial people of Tyre and Carthage, as well as the travelling merchants who conducted a line of traffic from the confines of Italy and Greece to Belgium, to visit our shores. The rake veins, of which the treasures are now only to be obtained with labour, aided by improved machinery, from amid the recluse beds of limestone rock, were then perceptible amid the loose and crumbling schistus, that scarcely covered their wealthy orifices. It was to this state of the lead mines of Derbyshire that Pliny alludes, in the celebrated passage to which our learned Camden refers. "In Britain," says the great Roman naturalist, "in the very upper crust of the ground, lead is dug up in such plenty, that a law was made on purpose to stint them to a set quantity."* To what extent the lead ore was sought after by the Britons themselves, or by the people who visited them for the purposes of trade, cannot now be ascertained; it must suffice us to have incontrovertible proof, that under the government of the Romans, the lead of this county had become a very important article of commerce. Blocks or pigs of lead have been discovered, having Latin inscriptions, and in the neighbourhood of the mines are to be traced the remains of Roman stations, houses and burial places.

Antiquity of the Lead Mines.

A Roman pig of lead, weighing 126 pounds, was found on Cromford moor near Matlock, in the year 1777, having the following inscription in raised letters on the top.

Roman Pigs of Lead.

IMP. CAES. HADRIANI. AUG. MET. LVT.

A second was discovered near Matlock, in 1783. It weighed 84 pounds, and was 19 inches long at the top, and 22 at the bottom. Its width at the top was $3\frac{1}{2}$ inches, and at the bottom $4\frac{1}{2}$. The inscription appears to contain these letters.

L. ARVCONI. VERECVND. METAL. LVTVD.

* Gibson's Translation of Camden, p. 494.

CHAP. 2. Roman Pigs of Lead.

A third, with the inscription also in raised letters on the top, was found on Matlock moor in the year 1787. It weighed 173 pounds, and was $17\frac{1}{2}$ inches in length, in breadth at bottom $20\frac{1}{2}$.

TI. CL. TR. LVT. BR. EX. ARG.

These inscriptions have given rise to various conjectures, and, accordingly, to a great display of erudition; but if we conceive, the LVT and the LVTVD to be contractions of LUTUDARUM, the name of a Roman station, next in order, according to Ravennas, to Derventio or Little Chester, and which is supposed to be Chesterfield, much of the difficulty will vanish. The first will then be found to have the name of the emperor Hadrian, connected with the name of the metallic district of which it is probable that Chesterfield was then, as Wirksworth has subsequently been considered, the regulating town. Hence this inscription would mean no more than that the block of lead upon which it was stamped belonged to the emperor Cæsar Hadrian Augustus, from the metallic district of Lutudarum.—The second would be under this interpretation stamped with the name of its owner, a proprietor of some mines, perhaps, or a merchant, Lucius Aruconus Verucundus, with the addition, as before, of the name of the mining district. The third appears to mean that the lead upon which it is found impressed, is part of the tribute due to Tiberius Claudius, from the mines (silver or lead) of the British Lutudæ or Lutudarum.—These interpretations are by far the most conformable to custom and common sense. The Rev. Mr. Pegge could not, we think, have considered the subject, when he conjectured the first of these inscriptions to mean "The sixth legion inscribes this to the memory of the emperor Hadrian." Such a mode of paying honour to the memory of an emperor was never before imagined, and we might as justly assert, that the king's mark, impressed upon goods seized under an exchequer process, has for its object the memory of our gracious monarch.

Antiquity of the Lead Mines.

But whatever may be the strict interpretation of the inscriptions upon these blocks, they are, in themselves, indubitable evidence that the mines of Derbyshire were worked by the Romans, or more probably by the enslaved Britons, already acquainted with the rude processes of that era, under command of their conquerors. The Saxons, who succeeded the Romans in the conquest and dominion of Britain, did not neglect the treasures, so abundant in the centre of their acquisitions; and by their having called an important mine near Castleton, Odin, from the name of one of their divinities, to whom they may be supposed to have consecrated it, we have a proof, that previous to the introduction of christianity amongst them, they had directed their attention to the mineral wealth of the heptarchy. The mines in the neighbourhood of Wirksworth were wrought before the year 714; at which period that district belonged to the nunnery at Repton, over which Eadburga, the daughter of Adulph, king of the East Angles, presided as abbess. In that year the abbess sent to Croyland in Lincolnshire, for the

interment of St. Guthlac, who was originally a monk of Repton, a sarcophagus of lead lined with linen *(plumbeum lintheumque)*. This lead was obtained from the possessions of the old Saxon religious establishment at Repton, part of which were the mines near Wirksworth. In the year 835, Kenewara, then abbess of the same nunnery, made a grant to Humbert, the alderman, in which she surrenders that estate of mines, called Wircesworth, on condition that he gives annually as a rent to archbishop Ceolnoth, lead to the value of three hundred shillings, for the use of Christ's church, Canterbury. On the destruction of the religious houses by the Danes, in 874, it is probable that the lead mines became the property of the crown. The mines in the Peak and in the wapentake of Wirksworth, were undoubtedly regarded as the peculiar domain of the sovereign at a very early period, and as such they are mentioned in Domesday book.

Antiquity of the Lead Mines.

The documents given in the Appendix will prove the jealousy with which the monarchs of England have ever regarded these mineral treasures. In the sixteenth year of the reign of Edward I. an inquisition was held at Ashbourn, in which it was proved that the right of all minerals was in the prerogative royal, and that the crown had a claim of dues from all who worked the mines. Another inquisition was held at Ashbourn and at Wirksworth in the reigns of Edward VI. and Philip and Mary.—Queen Elizabeth, in the sixteenth year of her reign, granted all her mineral possessions in this county to a society or corporation, which was to consist of thirty-six shares, divisible into halves and quarter shares. Her grant and charter will be found in the Appendix.

At the time of the Norman survey, as we have already stated, the business of the lead mines was extensive. The castle of the Peak, which was probably built soon after the conquest, was, as appears by a survey made in the reign of Elizabeth, covered with lead. The Domesday book mentions three mines at Wirksworth, and one in each of the manors of Crich, Ashford, Bakewell and Meterford.* The king's mine at Wirksworth was granted to Robert del Don by Edward I.: that of Crich, which had been granted by king John to Hubert Fitz Ralph was confirmed by Edward II. to Roger de Belers in 1325. The Devonshire family have long been lessees of the mines in the hundred of High Peak. The lease of those in the wapentake of Wirksworth was in the family of Rolles, and having been sold under a decree of chancery, is now vested in Richard Arkwright, esq. of Willersley castle.

The mineral laws consist of a body of regulations, framed upon ancient rights, customs and immunities. These particularly apply to the portion of the county called the King's field, which contains the hundreds of the High Peak and the Wirksworth wapentake or Low Peak, with the exception of Griffe liberty near Hopton, some estates near Eyam and other places. These laws are considered to extend, with some modifications, to the mines at Crich, which are situate in the Morleston hundred.—There have been disputes, in which it has been insisted that the rights of mining do not attach to any lands or manor which did not originally appertain to the duchy

Mineral Laws.

* "It is particularly observed, that the three manors of Bakewell, Ashford and Hope, paid in the time of Edward the Confessor £30. and five cart loads of 50 sheets (of lead) but that in the time of the Conqueror it paid only £12..6."—Meterford is supposed to mean Matlock.

CHAP. 2. Mineral Laws.

of Lancaster, but it seems to be the opinion of the majority of the miners, that the whole of the mining districts are subject to these laws, or to some modification of them.

These laws or customs (a curious compendium of which will be found in the Appendix) originally authorised any man or set of men to enter at any time into any part of the King's field, comprising the greater part of the mountain limestone district of Derbyshire, to dig or search for veins of ore without being accountable to the owners or occupiers of the soil, for any damage which they did to the surface, or even to the growing crops. At present, however, it is held, that unless a miner procures ore enough from any search he may make after a vein, to *free* the same, that is, to pay to the king or his farmer or lessee, a dish of ore, he is liable to the occupier for all damage he may have done him. Fortunately for the farmers of the present day, the searches were so repeated and universal in former times, that few persons think of digging or delving on the limestone surface in search of new veins of ore. In the King's field there are several officers appointed called *bar-masters*, and mineral courts are held, at which a jury of twenty-four miners decide all questions respecting the duties or *cope* payable to the king or his farmer, and to the working of the mines, by those to whom the bar-master has given possession. In certain cases, this court can enforce the payment of debts incurred in the course of mining transactions.

Barmaster gives Possession.

There can be little doubt of these laws having been framed when the mines were worked entirely by manual labour. It appears from them, and from the customs still referred to in the mineral districts, that when a person had found a vein of ore, he made certain crosses on the ground as a mark of temporary possession. He then informed the bar-master, who received a measure or dish of ore, the first produce of the mine, as the condition of permitting him to proceed in working his *meer*, or measure of twenty-nine yards in length of the vein. On that occasion the bar-master took possession of the next adjoining fourteen and half yards, or the half meer of the vein for the king. If the vein appeared to be productive, other applications were made, and other *meers* or measures of twenty-nine yards were granted in succession, it being a condition that each person or company possessing their meer or meers in partnership (called groove fellows) should immediately begin and continue to work, and that, in case of intermission for three successive weeks, the bar-master might dispossess those to whom the mine had been assigned and give the works to others.

Method of Working the Mines.

The first mines were made where the limestone is covered with a light soil. The ore or spar was thrown out by common hand-instruments on each side of the vein. When they had thus sunk and thrown out the vein stuff as far as was practicable, a square frame was prepared, composed of four narrow planks of wood, laid across and pinned together at the corners, on which two others were erected, with holes or notches to receive the spindles of a turn-tree or rope barrel, for winding up ore in small tubs. This apparatus, called a *stowse*, being erected on each meer or mine, the sinking was further continued, and the heaps on the sides of these *open works* or *open casts* increased, until, in numerous instances, a perpendicular ditch of the width of the vein, and many yards deep, was opened, with

Method of Working the Mines.

proportionally large heaps of rubbish on each side, for many hundred yards in length, with other similar veins and heaps, parallel to, or crossing them at various angles. Great numbers of the mines thus opened proved too poor in their produce of ore, to be sunk lower than the men could throw out the stuff, before the miners abandoned them; and others, after some progress had been made in deepening them by means of *stowses*. But, as in after times, other adventurers might appear, who would resume the work, the strictest laws were made and enforced by the mineral courts, for preventing the occupiers of the soil, or any other persons, from meddling with the dangerous ditches, or throwing in the heaps of barren white spar and rubbish which the miners had left on the land. Some shallow mines, opened apparently in the very earliest periods of mining in Derbyshire, still remain, and, until within a few years past, most, if not all, of the veins which had been tried to a few yards in depth and abandoned, remained in this state or altered only by the treading of cattle, and the natural mouldering of the sides, except where roads, and the fence walls dividing properties, crossed them. As the mines which proved richer in ore increased in depth, instead of continuing to draw the vein stuff to the surface, the miners constructed floors or stages of wood across the mine, called bunnings, just above their heads, and on these they threw the refuse; and as the work thus proceeded, the shaft under the *stowse* was lined with either timber or stone, and a regular hill was at length formed, called the mine hillock.

In process of time, the mines increased in depth, and reached the water in the strata. The labour and expense then exceeded the value of the ore, and many valuable mines were abandoned. *Horse-gins* were then contrived, and *soughs* were driven for draining off the water. The mines or meers became consolidated, or the property of them united; and being connected below, the ore and vein-stuff was carried to particular *shafts*, and on the hillocks, *coes* or small buildings were erected, for stowing ore and tools, with sheds for the accommodation of the ore-dressers.

The mining laws, which had previously required a working *stowse*, and its actual use, at least once in three weeks, became relaxed, and small models of *stowses*, made of thin laths of wood, provided by the bar-master, came in use, as the means of keeping possession of all the *meers* but one, in a consolidated mine. This custom is rigidly enforced even at the present day, so that a mine on which large steam engines, powerful horse-gins, and other expensive apparatus have been long used, is not held to be legally occupied, unless one of these pigmy memorials of the primitive mode of drawing ore, is constantly kept "in sight of all men," as the law expresses it, on or within a certain distance of the drawing shaft, and others on the meers of ground or lengths of twenty-nine yards.

Ancient Laws injurious to Improvement.

These ancient mineral laws, framed in times very different from the present, have become in numerous instances injurious to the progress of improvement. If a known vein, whether productive or not, crosses the paddock or garden of a farmer, or the park of a gentleman in the King's field, it must be taken of the bar-master by the payment of a dish of ore: sham stowses, and even a real stowse must be erected, and periodical attempts, however slight and colourable they may be, must be made to work the vein. Unless this is done, any other person, by application to the bar-

CHAP. 2.

Ancient Laws injurious to Improvements.

master, may dispossess him of such vein, enter his lands and make buddle-ponds, and ways and roads within his grounds. The mining laws required, not merely the discovery of a vein of ore, but that the mine should actually have been worked, so far at least as to obtain the king's dish of ore, before possession of it could be given by the bar-master, but now the bar-masters do not require proofs that the king's dish of ore presented to them is actually obtained from the vein, to which they are officially called to grant a title. This relaxation of the mineral laws has in some measure protected private property, but it has given rise to other evils, of which the possessors of old mines with great justice complain.

It cannot be expected that we should here explain the whole of the processes by which the mines are now worked. Our survey of this part of the subject must necessarily be very cursory.—In working deep rake veins, roofs of shale or toadstone, termed bunnings, extend over the miners' heads, who, in getting the ore, are said to drive a *stoop of work* before them. Sometimes there is only one stoop of work, about four, five, or six feet in height, in progress at the same time; while, in other mines, where many men are employed, two or three stoops are wrought, the upper one being kept forward two or three yards, and the next as much before the lower one or sole, like steps, by which the miners do not interfere with each other materially. The face of a stoop or fore-field of the mine, is seldom worked upright or straight, but is hollow in the middle, to suit the swing of the miner's pick; and many of the miners pride themselves in the neatness of the face of work which they preserve in moderately hard veins, where the pick is alone sufficient for the work. In some mines, strong iron wedges, and even frequent blasts of gunpowder are necessary for loosening and getting the ore and spar. The produce of ore, even in the same rake vein, varies exceedingly: an extent of one yard in depth and height, in one of the best mines, will differ in the quantity of ore obtained from 1600 to 300 pounds.—The thicker pipe veins are worked in the same manner, but in working the smaller or thin pipe veins, it is necessary to cut out or enlarge the gates or passages, as in working thin seams of coal: in these the workmen are obliged to crawl on their hands and knees, and in many instances to lie along on their sides.

We have already mentioned, that the Derbyshire mines are held in shares. These shares are frequently small, as 48ths; 96ths; and even 384ths and 768ths; are held in some works. The very smallest mines often have many partners concerned in them.*

Besides the regular mines of lead ore, this metal is sometimes procured in the natural alluvial accumulations of ore and spar; as at Green Lane, south of Brassington, at Great Longsdon, at Over-Haddon, and at Priest-cliff. It is indeed the common opinion, that the ore thus found is the remains of what the early miners carried to these places to dress; and this,

* Tithes upon ore are paid only in Eyam parish and in Wirksworth, including Cromford and Middleton. The pretence of claiming the *tithe* of lead ore, is said to have been, that the ore grew and renewed in the vein. The composition with the clergyman at Wirksworth will be found in the note (p. 67.) In Ashover, Matlock, Darley and other parishes, expensive litigations were carried on by the clergy previous to 1780, for enforcing the tithe of lead ore, but without success.

Masses of Lead Ore.

in some cases, does not appear improbable, but that masses as ponderous as lead ore, have been moved considerable distances in common with other alluvial matter, is sufficiently clear, from several masses of lead ore, one of which is stated to have weighed sixty pounds, having been found about forty years ago, in deepening the water course below Sturston mill, near Ashbourn; and from a mass of lead ore weighing 25 pounds, which was seen by Mr. Farey himself, and was taken from the gravel-pit at the top of the hill, in the village of Wyaston in Edlaston.

A list of LEAD-MINES, *which are or have been in work in Derbyshire.*

List of Lead Mines.

Abbots-hole, or white-vein, at Alport, in Yolgrave, in 1st limestone rock, lead ore
Adventure, in Cromford, in 1st lime, lead, recent asbestos
Alport, at Spout, near Ashley-hay, in Wirksworth, in 1st grit rock, lead
Amos-cross, in Stanton in the Peak, shale and 1st lime, lead
Ash-cross, in Cromford, shale and 1st lime, lead, ore in shale, ochre, fibrous spar, large cubes of fluor spar and curious crystals, corrosive water
Bacchus-pipe, near the cliff, in Crich, in 1st lime, lead, hades W very fast.
Bacon-close, near Yolgrave, in 1st lime, much lead: an Hydraulic pressure engine
Bage, in Wirksworth, in shale and 1st lime, lead, cawk (or barytes) a hot spring in 1st lime
Bald-mare, in Brassington, in 3rd toadstone, lead, white ore, ore in toadstone, ochre, china clay, gravel
Ball-eye, in Bonsal, in — lime, much lead, some silver, purple fluor, bones
Barkers-field, in Crich, in 1st lime, lead, crosses several veins
Barley-close pipe, in Wensley, near Darley, in 1st lime, lead
Barlow-flat, NW of Wirksworth, in 3rd lime, lead calamine
Barrow Vein, in Cromford, in 1st lime, lead, wayboards, hades very curiously, crosses gang vein
Biards-Barn, in Wirksworth, in shale, shale limestone, and 1st lime, lead
Birds-head, in Bakewell, in 1st lime, lead, the great Bakewell fault crosses its N end
Black-hillock, on Tideswell moor, 3rd lime, and 3rd toadstone, a trial
Black-hole, in Eyam, in shale and 1st lime, lead
Black-shale-pits, in Yolgrave, 1st lime and 1st toadstone, lead
Black-stone Shaft, at Overton, in Ashover, in 1st lime and toadstone, and 2nd lime, a trial
Blakelow, near Breach-gate, in Bonsal, in 2nd lime, lead, black jack
Blakelow-Engine. See *Longstone-edge-venture*
Blithe, at Alport, in Yolgrave, in 1st lime, much lead, black jack
Blobber, in Wirksworth, in 1st lime detached, lead
Blythe, in Stanton in the Peak, in 1st lime, lead, pyrites (or brazil)
Boggard, or Don-Philip, in Wirksworth, in 3rd and 4th lime, lead in large cubes, cawk, the great limestone fault crosses its E end
Bondog-hole (or Dog-holes) in Middleton by Wirksworth, in 3rd and 4th lime, lead, ore in toadstone, cawk, very wide in 3rd lime, a wayboard in 4th lime, a cavern, stalactites, hades, squinted, a fault through it, deep, large hillocks of refuse vein-stuff
Bond's Vein, NW of Wirksworth, in 3rd lime, gravel
Bonsal-Leys mines, in Bonsal, in 3rd lime, lead, calamine, cawk
Booth-Lee, at Brushfield, in Bakewell, in 2nd lime, lead, black wad, yellow ochre
Boston Vein, in Peak forest, in 3rd lime, lead
Botany-Bay, at High Needham, in Hartington, in 4th lime, lead
Bright-side, in Rowland, near Hassop, in 1st lime, lead, hades S very fast
Brimstone-Dyke, at Overton, in Ashover, in 1st lime, much lead, a loose shale gulf
Broad-low, at Bretton, in Eyam, in shale and 1st lime, lead
Brook-head, in Eyam, in shale and 1st lime, lead, slickensides, petroleum in lime geodes in shale
Broomhead's-venture, at Riley, in Eyam, in shale and 1st lime, lead
Bull-Rake, near Tideslow top, in Tideswell, in 3rd lime, lead
Burrows, in Middleton by Wirksworth, in 3rd and 4th lime, much lead, pyrites, squinted
Cackle Mackle, in Great Longsdon, in 1st lime, lead, black wad
Calow, in Winster, in 1st and 2nd lime, lead
Calve-stone, on Tideswell moor, in 3rd lime, lead, ore in chance beds of toadstone
Carrion-hole, in Cromford, in 1st lime, lead, black jack, hades S
Carsington Hill, ¼m. NW of Carsington, in 4th lime, lead, calamine, manganese
Caulk, in Crich, in 1st lime, lead
Cawk Vein, in Cromford, in 1st lime, lead, calamine, cawk, crooked, crosses gang vein six times
Chapel-dale, at Flagg, near Monyash, in 3rd lime, lead, white ore, clay wayboards
Chap-maiden, on Tideswell moor, in 3rd lime, lead, chance toadstone beds
Church Rake, in Crich, in 1st lime, lead
Clay-pit-dale, near Hartington, in 4th lime, lead, china clay, gravel
Clear-the-way, on Tideswell moor, in 3rd lime and 3rd toadstone, lead
Cliff-side, N of Winnets dale, in Castleton, in 4th lime, lead, coloured fluors
Cliff-stile, in Eyam, in 1st lime, lead
Coal-hole rake and pipe, on Masson hill, in Matlock, in 2nd lime, lead, roof fallen
Coal-pit-hole, at Perry-foot, near Castleton, in 4th lime, lead
Coast-rake, in Winster and Elton, in shale and 1st lime, lead, a fault through it, crosses many veins, wood, gravel.
Cockwell, at Mill-town, in Ashover, in shale and 1st lime, lead
Corder-Low, near Ludwell, in Hartington, in 4th lime, hades 1 in 3
Cornel-Rake, at Matlock bath, in 2nd lime, lead, calamine
Cow-Close pipe, in Elton, in 1st lime, lead, a toadstone floor, 60 yards wide
Cow-Close. E of Over-Haddon, in 1st lime, lead
Cowslop, E of Wardlow village, near Tideswell, in 1st lime, lead
Cracking-whole Rake, in Eyam, in 1st lime, lead, slickensides

CHAP. 2. List of Lead Mines.

Crash-purse, in Yolgrave, in 1st lime, lead, an Hydraulic-pressure engine
Crich-Cliff, NW of Crich, in 1st lime, lead, yellow transparent fluor, clay wayboards
Crichman Pipe, on Masson hill, in Matlock, in 2nd lime, lead
Crooked Rake, in Crich, in 1st lime, lead
Cross Flat-work, in Middleton by Yolgrave, in 1st lime, lead
Crosslow Rake, in Foolow, near Eyam, in 1st lime, lead, a large cavern
Cross-o'-th' dale-head, in Great Longsdon, in 1st and 2nd lime, lead
Cross-Rake, on Matlock High Tor, in 1st and 2nd lime, lead, calamine
Cumberland (or Rutland mine) at Matlock bath, in 2nd lime, lead, calamine, some copper, and carbonate of iron, capillary gypsum, clay wayboards, a cavern, roof fallen
Cursed-moor, near Aldwark, N of Brassington, in 4th lime, lead, white ore
Daily-bread, in Chelmorton, in 3rd lime, lead
Dale, in Over Haddon, in 1st lime and toadstone, lead, ore in toadstone
Dale-top, in Wirksworth, in 3rd lime, lead, gravel
Deep Rake, in Foolow, near Eyam, in 1st lime, lead
Deep Rake, in Hassop and Great Longsdon, in 1st lime, lead, white ore
Dimple, at Matlock bank, in Matlock, in shale and 1st lime, lead, pyrites, fluor, curious crystals, the only mine steam-engine going in 1809, in Derbyshire
Dimsdale, in Calke, adjoining Leicestershire, in yellow limestone, lead, black jack
Dirtlow, SE of Castleton, in 1st lime and toadstone, lead, ore in toadstone
Dog-hole. See *Bondog-hole*
Dog Rake, in Calver, near Hassop, in shale and 1st lime, lead, white ore
Dove-Gang. See *Gang*
Dovestone-Leys, in Cromford, in 1st lime, lead, calamine
Drake. See *Lime-kilns*
Dream. See *Stafford's Dream*
Dunshole, in Stanton in the Peak, in 1st lime, lead, pyrites
Earl of Mar, on Middleton intake, near Wirksworth, in 3rd and 4th lime, lead, hades, intersects a fault, clay wayboards
Edge-side Rake, in Foolow, in 1st lime, lead
Eyam-edge, near Great Hucklow, in Eyam, in shale and 1st lime, lead
Fall-hill, at Mill-town, in Ashover, in 1st lime, lead, large cubic fluor, quartz crystals
Field-side, S of Tideswell, in 3rd lime, lead, a fault through it
Field Rake, in Sheldon, in 1st lime, lead, very wide in spar
Fiery-dragon, in Bonsal, in 3rd lime, lead, ore in chert, white chert
Fore-side Rake, or faucet, in Castleton, in 4th lime, lead, Devil's-hall cavern
Fox-hole, S of Wirksworth, in 1st lime, lead, calamine
Gang, or Dove-gang, Godber, Goodluck, and Great-pits, in Cromford and Middleton by Wirksworth, in shale and 1st and 2nd lime, much lead, ore in shale and in toadstone, pyrites, black jack, large cubes of fluor, wide, hard spar, petroleum in lime geodes in shale, hades both S and N, squinted, slickensides, deep, large hillocks, a hot spring in 2nd lime, water-wheels in the sough under ground
Gentlewoman's Pipe, near Matlock bridge, in 1st lime, lead
Glade Rake, SW of Ashford, in 1st lime, lead
Godber, or Goodbehere. See *Gang*
Golconda Pipe, in Griffe, near Hopton and Brassington, in 4th lime, lead, immense caverns
Goodluck, in Cromford. See *Gang*
Goodluck (Burdet's) NE of Wirksworth, in 1st lime, lead, horse-gin pumps
Gorsey-dale, near Bright-gate, in Bonsal, in 3rd lime, lead, two chance toadstone beds
Granby shaft, at Matlock bank, in Matlock, in shale and 1st lime, a trial
Great-Pits. See *Gang*
Green-linnet, W of Brassington, in 4th lime, lead, green ore, china clay
Greensword (or Green-swarth) rake, in Ashford, 1 m. NE of Monyash, in 1st lime, lead, clay wayboards
Greenway-field, in Cromford, in 1st lime, lead, calamine
Gregory, at Overton, in Ashover, in 1st grit, shale, and 1st lime, much lead, antimoniated lead ore, ore in shale, two ribs of ore of different kinds, transparent fluor with silvery pyrites, large crystals of calc. Spar, slickensides, bitumen in 1st lime; a shaft 300 yards deep! a large hillock
Grey-mare, in Wirksworth, in shale and 1st lime, lead
Hading-vein, in Cromford, in 1st lime, lead, hades S 1¼ in 1
Hagues Groove, in Callenge-low, near Monyash, in Yolgrave, in 1st lime, lead, a crooked rake
Hang-worm, near Bright-gate, in Bonsal, in 3rd and 4th lime, lead
Hard Rake, in Crich, in 1st lime, lead
Hard Rake, in Sheldon, in 1st lime, lead, calamine
Hare-dale. See *Mockshaw*
Have-at-all, in Great Hucklow, in shale and 1st lime, lead, a fault through it
Hay-cliff, (or High-cliff) at Bretton, in Eyam, in shale and 1st lime, much lead, slickensides
Hazlehurst, in Crich, in 1st lime, lead
Hedge Rake, NW of Tideswell, in — lime, lead
Hell Rake, in Bradwell, in 3rd lime, lead
High-field, in Stoney Middleton, in 1st lime and toadstone, lead
High-low Pipe, in Monyash, in 1st lime and toadstone, lead
High Rake, in Tideswell, in 3rd lime and toadstone, lead, ore in toadstone
High-tor Rake, near Starkholmes, in Matlock, in shale and 1st lime, lead, yellow ochre
Hills Rake, at Windmill-houses, near Great Hucklow, in 1st and 3rd lime, lead, yellow ochre, the great limestone fault crosses it
Hill-top, S of Middleton by Wirksworth, in 3rd and 4th lime, lead, gravel, squinted N, deep, large hillocks
Holley-hole, in Wirksworth, in shale and 1st lime, lead
Horse-steads, in Taddington, in 2nd and 3rd limes and toadstones, lead
Hubberdale Pipe, in Monyash and Sheldon, in 1st lime, much lead, white ore, barytes
Hucklow-edge, in Great Hucklow, in shale and 1st lime, much lead, a fault through part of it, large hillocks
Jackson's, in Middleton by Wirksworth, in shale and 1st lime, lead, crossed by a fault at W end
Jowl-groove, in Peak forest, in 4th lime, lead
Knowle's, on Masson hill, in Matlock, in 2nd lime, lead, fluor spar, large caverns
Lady-gate, near Matlock bridge, in alluvium and 1st lime, lead
Ladywash, in Eyam, in shale, 1st lime, and toadstone, much lead, ore in shale and in toadstone, slickensides, a shaft 306 yards deep!
Lane-head. See *Speedwell*
Lea-wood, at Snitterton, in Darley, in 1st lime, lead
Leas Vein, NW of Wirksworth, in 3rd lime, lead, gravel
Lees, in Taddington, in 2nd and 3rd lime, lead, squinted
Lime-kilns, and drake, in Winster, in 1st lime, lead, petroleum, gravel, caverns
Littlebrook-head, in Stoke, near Eyam, in shale and 1st lime, lead

Little Pasture, in Eyam, in shale and 1st lime, lead, ore in shale, and lime geodes containing petroleum, hades, fire-damp
Long-dale-head, NE of Newhaven-house, in Hartington, in 3rd toadstone and 4th lime, lead, black wad, ochre
Long Rake, in Yolgrave and Middleton, in 1st and 2nd lime, lead, calamine
Longstone-edge-venture, in Great Longsdon, in 1st and 2nd lime, much lead, fibrous spar, hades N: this rake parts and meets again
Lucky-ploughman, in Brushfield, in 2nd lime, lead, lately opened, two ribs of ore of different kinds
Magpye, S of Sheldon, in 1st lime, lead
Maiden Rake, W of Little Hucklow, in 3rd lime, lead, ore in toadstone, 4 chance toadstone beds
Mandale Pipe and Rake, in Over Haddon, in 1st lime, lead, wide, one part hades, a very old mine
Maury Flat-works, in Taddington, in 2nd and 3rd lime, lead, pyrites, ore in toadstone
May Sough, in Great Hucklow, in 1st lime, lead
Meers, in Brassington, in 4th lime, lead, white ore, green ore
Meers, in Cromford, in shale and 1st lime, lead, calamine, cawk
Meerbrook, in Wirksworth, in shale and 1st lime, lead, found in 1807 in the forefield of the new sough
Merlin's Mine, in Eyam, in 1st lime, lead, a cavern and beautiful stalactites, stalagmites, &c. gravel
Middle-ditch, in Middleton by Wirksworth, in 1st lime, lead, calamine
Middle-field, at Foolow, in Eyam, in 1st lime, lead
Mill-close, in Wensley, near Darley, in shale and 1st lime, lead, ore in shale, hazle nuts
Mill-dam, in Great Hucklow, in shale and 1st lime, lead
Millers Pipe, NW of Castleton, in 1st lime, lead, yellow transparent fluor
Mockshaw, or Hare-dale, NW of Bakewell, in shale limestone and 1st lime, lead, chance toadstone beds, clay wayboards
Moseley Groove, at Foolow, in Eyam, in 1st lime, lead
Moss Rake, in Bradwell, in 3rd lime, lead, cawk, a large spring of water, large hillocks
Mossey-Meer, in Winster, in 2nd lime and toadstone, lead, white ore, green ore, ochrey clay
Mouldridge, near Pike-hall, in Bradburne, in 4th lime, lead, calamine
Mule-spinner, in Bradwell, in 3rd lime, lead, Bagshaw's cavern in it, beautiful stalactites, &c.
Mullet-hill, or Stoney-way, in Matlock, in shale and 1st lime, lead, corrosive water
Nay-green, in Little Longsdon, in 1st lime, lead
Nester's or Nestus Rake, on Masson hill, in Matlock, in 2nd lime, lead, calamine, black jack
Nether-hay, in Matlock, in 1st lime, lead, chert breccia
Newhaven Mine, near Newhaven-house, in Hartington, in 4th lime, lead, white ore
New Rake, in Castleton, in 4th lime, lead
Nick-sough, W of Yolgrave, in 1st lime and toadstone, lead
Noger-hole, on Middleton moor, in Wirksworth, in 3rd and 4th lime, lead, clay wayboards
North-Cliff, in Wirksworth, shale and 1st lime on E, and 3rd and 4th lime W, lead, cubic transparent fluor, wide, the great limestone fault through it
Nunleys, S of Pindale, in Castleton, in 3rd lime and toadstone, lead, calamine, black jack, ore in toadstone, worked by a *horizontal drift* or gallery
Nursery, N of Hopton, in dunstone or 3rd toadstone, lead, copper, soft clay, ore in toadstone
Nursery-end, in Carsington, in 4th lime, lead, calamine
Oakcliff, W of Wirksworth, in 3rd lime, lead, calamine
Odin, NW of Castleton, in shale and 1st lime, lead, black jack, fluor, cawk, elastic bitumen, selenite, sulphur, slickensides, hades S, vertebra, a very old mine
Old Isaac's venture, in Elton, in 1st lime and toadstone, lead, ore in toadstone
Old Nester's or Nestus Pipe, on Masson Hill, in Matlock, in 2nd lime and 2nd toadstone, much lead, calamine, a very old mine
Old-Tor, N of Winnets Dale, in Castleton, in 4th lime, lead, coloured fluor
Orchard Pipe, in Winster town, in 1st lime, lead, 150 yards wide! caverns in it
Orchard, in Wirksworth, in shale and 1st lime, lead, cawk, cubic transparent fluor
Overton, in Ashover, in 1st grit, shale, and 1st lime, much lead, cawk, large crystals of calc. spar
Ox-close, at Snitterton, in Darley, in shale and 1st lime, lead, clay wayboards
Oxlow Rake, in Peak forest, in 3rd and 4th lime, lead, 6 yards wide
Peak Pipe, at Calver, near Hassop, in 1st lime, lead
Pearson's-venture Pipe, near the cliff, in Crich, in 1st lime, lead
Pens Rake, in Wirksworth, in shale and 1st lime, lead
Perseverance (formerly White Rake) in Carsington pastures, in 4th lime, lead
Picture-end, at Hazlebadge, near Bradwell, in shale and 1st lime, lead, yellow fluor
Placket Pipe, in Winster, in shale and 1st lime, much lead, wide, with caverns, one 120 yards high
Portaway, near Eldon hill, in Peak forest, in 3rd and 4th lime, lead
Portaway Pipe, in Elton and Winster, in shale and 1st lime, much lead, black-wad, 200 yards wide! gravel
Porters' in Bonsal, in 1st lime and toadstone, lead
Prince-Charles, NW of Wirksworth, in 3rd lime, lead, calamine
Providence, NE of Brassington, in 4th lime, lead, white ore
Putty-hill, in Brushfield, in 2nd lime, lead, calamine
Raddle-pits, in Bradwell, in 3rd lime, lead, yellow and red ochre
Ranter, or Raven-tor, in Wirksworth, in shale and 1st lime, much lead, white ore, black jack, pyrites, ochre, cawk, Taylor's vein very hard spar, wide, hades E, a fault through it, the SW side highest by 162 yards! skirts dropt down, a cavern
Ratchwood, in Wirksworth, in shale and 1st lime, much lead, black jack, cawk, cubic transparent fluor, crossed by a fault at its W end
Rath-Rake, in Elton town, in 1st lime, lead
Raven Tor, in Crich, in 1st lime, lead
Red-mineral, S of Newhaven house, in Hartington, in 4th lime, red iron ore, pretended cinibar
Red Rake, near Sheldon, in Bakewell, in shale limestone, lead
Redseats, E of Castleton, in 1st lime, lead, calamine
Ribden, near Caldon, Staffordshire, in 4th lime, lead, copper
Robinstye Flat-work and Rake, in Over Haddon and Meadow-place, near Yolgrave, in 1st lime and toadstone, lead, ore in toadstone, the great Bakewell fault crosses it
Robin-wash, in Great Longsdon, in 1st toadstone and 2nd lime, lead
Rowbottom, in Crich, in 1st lime, lead
Rutland. See *Cumberland* mine

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List of Lead Mines.

Sallet-hole, in Great Longsdon, in 1st lime, lead
Salters-way, near Bright-gate, in Bonsal, in 2nd toadstone and 3rd lime, lead, chance toadstone beds, and filling fissures
Samuel, or Samuel-engine, on Middleton moor, near Wirksworth, in 3rd and 4th lime, lead, squinted N, deep, large hillocks
Sand-hole Pipe, SW of Wirksworth, in detached 4th lime, lead, gravel
Seedlow, in Wardlow and Stoney Middleton, in 1st and 2nd lime, lead
Seven-Rakes, near Matlock bridge W, in 1st and 2nd lime, lead, black jack, ore in toadstone, fluor, gravel, bones and teeth
Shaw-engine, in Eyam, in shale and 1st lime, lead, ore in shale, allum, vegetable impressions in the shale
Shuttle, NE of Tideswell, in 3rd lime, lead
Side-Rake, near Starkholmes, in Matlock, in shale and 1st and 2nd lime, lead, ore in toadstone
Side-way, in Callenge-low, near Monyash, in Yolgrave, in 1st lime, lead, a crooked rake
Silence, in Grindlow, near Eyam, in 1st lime, lead
Silver-hillock, in Great Longsdon, in 1st lime, lead
Slack, near Bright-gate, in Bonsal and Wensley, in 2nd and 3rd lime, much lead, chance toadstone beds, and filling fissures
Slack, on Middleton moor, near Wirksworth, in 3rd and 4th lime, lead, squinted N, deep
Small-dale-head, in Bradwell, in 1st lime, lead, tigre-stone fluor
Smiling-fancy, in Elton, in 1st lime, lead
Smithfield, at Bridge-town, in Wensley, in 1st lime detached, lead, kessel
Solms, in Wirksworth and Middleton, in 3rd lime, lead, gravel
South-side, in Stoney Middleton, in 1st lime and toadstone, lead, pyrites
Spar-Rake, W of Middleton by Wirksworth, in 3rd lime, much lead, a wayboard in 4th lime
Speed, in Grindlow, near Eyam, in 1st lime, lead
Speedwell, or Lanehead pipe, in Castleton, in 4th lime, a trial, foreside cavern and waterfall in it
Stafford's-dream, or Dream, W SW of Wirksworth, in 4th lime detached, much lead, ochre
Stone-pit Mine, in Over-Haddon, in 1st lime, lead, rounded bloodstones, the last mine opened
Stoney-Lee, in Stanton in the Peak, in shale, coarse shale-grit and 1st lime, lead, very large crystals of calc spar
Stubben, E of Bonsal, in 2nd lime and white chert, lead, steatite
Suckstone, in Brassington, in 4th lime, lead, steatite, china clay
Tanner's-venture, at Hazlebadge in Bradwell, in 1st lime, lead, yellow transparent fluor
Thistley, in Wirksworth, in shale and 1st lime, lead, hades much, skirts dropt down
Thornhill-slack, S of Tideswell, in 3rd lime on N, and 3rd toadstone S, lead, a fault through it
Tidslow-Rake, in Eyam, Grindlow, Great Hucklow and Tideswell, by various names, in 1st and 3rd lime, lead, the great limestone fault crosses it in Hills rake
Tinley, in Cromford, shale and 1st lime, lead, ore in shale
Town-head Mine, in Ashover, in shale and 1st lime, lead
Townsend, at Overton in Ashover, in 1st lime and toadstone, lead
Trafalgar, or Willow, in Winster, in 1st lime, lead
Turnip-close, in Monyash W, in 2nd lime, lead, clay wayboards
Twelve Meers, in Eyam, in shale and 1st lime, lead
Venture, in Cromford, in shale and 1st lime, lead, plumose white gypsum
Virgin Mine, at Hazlebadge near Bradwell, in 1st lime and toadstone, lead, sulphur in toadstone, slickensides, a skull and teeth
Upper-field, in Brassington W, in 4th lime, lead, green ore, china clay
Wall-close, in Wirksworth, in shale and 1st lime, lead, white ore
Wam, or Wham, in Sheldon, in 1st lime and toadstone, lead, crosses Hubberdale pipe
Wards Scrin, in Crich, in 1st lime, lead
Warm-bath, near Sheldon in Bakewell, in 1st lime and toadstone, lead, ore in toadstone
Water-Groove Pipe, at Wardlow-mires near Foolow, in shale and 1st lime, lead, softs
Water-hole, in Hassop, in 1st lime, lead, hades
Water-hull Pipe, NW of Castleton, in 4th lime, yellow ochre, fine coloured fluors
Weather-Rake, E of Castleton, in 3rd or 4th lime, lead
Well-close in Brushfield, in 2nd lime, lead, black wad
Wells-Rake, in Stanton in the Peak, in 1st lime, lead, pyrites
Westedge in Ashover, in shale and 1st lime and toadstone, lead, black jack, ore in toadstone, fluor, fibrous spar, petroleum in lime geodes in shale, slickensides, a fault through it, vegetable impressions in shale
Wet Rake, in Castleton and Bradwell, in 3rd lime, crosses several rakes
Wheels Rake, in Over-Haddon, Alport and Stanton, in shale and 1st lime, lead
White-low Mines, near Ible in Bonsal, in 3rd lime, lead, much calamine
White Mine, in Brassington, in 4th lime, lead, white ore
White Rake, in Great Hucklow and Tideswell, in 1st and 3rd lime, lead, white ore, green ore, ore in toadstone, toadstone riders, a fault crosses it
Windmill, in Wensley near Darley, in shale and 1st lime, lead, very wide, soft dirt in it
Yate-stoop Pipe, in Winster, in shale and 1st lime, much lead, the vein crooked, a shaft 230 yards deep, a steam-engine under ground formerly
Yield, in Middleton by Wirksworth, in 1st lime, lead, calamine, hades much, skirts dropt down
Yoke-cliff, in Wirksworth and Hopton, in 3rd and 4th lime, lead, three ribs of ores, hard spar, wide, hades S, the great limestone fault through the E part of it.

Cupolas.

The *Cupolas* or low-arched reverberatory furnaces, now exclusively used for the smelting of lead ore in Derbyshire, were introduced from Wales by a company of Quakers, about the year 1747, the first of which was erected at Kelstedge, in Ashover; but this is now disused and pulled down, as will be seen from the following list.

Cupolas for Smelting Lead in Derbyshire.

List of Cupolas.

Barbrook, in Baslow (and slag mill)
Bradwell, 2 cupolas, Jeremy Raye and James Furness
Meer Brook, or Devil's Bowling Alley, in Alderwasley, Richard Hurt, esq.
Lea, near Cromford (and slag mills) John Alsop and Co.
Middleton Dale, in Stoney Middleton (and slag mill) John Barker, esq.
Stone-edge in Ashover (and slag mill) William and Charles Milnes
Totley (and slag mill) George B. Greaves, new colour works
Via Gellia, in Bonsal Dale
Bonsal (and slag mill) John Alsop and Co.
Stoney Middleton (and slag mill) Duke of Devonshire, Custom work for poor miners.

Average produce of Lead Ore.

It has been estimated that the average produce of ore is from 66 to 76 per cent.: but some assayers of the Derbyshire galena have stated 82, and even higher rates per cent. to be obtained from it.—The pieces or half-pigs of lead are not of any certain weight, though the smelter endeavours, in filling the mould, to approach as near to 176¼ lbs. as he can, this being the sixteenth part of the mill-fodder of 2820 lbs.—The Derbyshire lead is re-weighed at Stockwith, when transshipped from the Chesterfield canal boats into coasting vessels in the Trent, by the fodder of 2408 lbs.; at which weight the smelter makes up his invoice to a London lead-merchant; but on the arrival of the article, it is re-weighed by the fodder of 2184 lbs.; or if consigned to the Hull market, it is there re-weighed by the fodder of 2340 lbs.; and yet the custom duties are payable on the fodder of 2240 lbs.*

Slickensides.

Slickensides.—Sometimes the vein-stuff is found perfectly divided vertically throughout, and the surfaces polished; and these are called *slickensides* or cracking-whole, which usually are ribbed or slightly fluted, horizontally: the appearances are very similar to those of faults, but extraneous matters do not usually accompany them, the sides being mostly in very close contact; and often, after one side is removed, so as to give room, especially if the surface be pecked or broken, large slapits, spels, or fragments fly off, sometimes with loud explosions, and continue so to do for some days or longer, until the gate or passage in such vein is greatly enlarged thereby: this is the case in Gang mine, in Cromford, where the hard 1st toadstone also, in the gates and shafts, thus spels off, until they want timbering, often, to support the roof and sides. The slickensides in the mines about Eyam, do not explode now, on mere scratching, as they were said to do in the late Mr. Whitehurst's time. Farey's list notes nine instances of mines with slickensides in them.

Ironstone.

Iron.—The coal district, or great coal field, already described, contains nodules of ironstone, and frequently thin strata of rich compact argillaceous iron-ore. The most valuable is found towards the middle of the track which has been mentioned as extending from West and Kirk Hallam to Hallam on the borders of Yorkshire; but in the High Peak, where coal is found among the shale and grit of the Chinley hills, no iron has been discovered. Mineralogists have remarked that the colour and texture of the iron-ore in this county are very various. The ores of the argillaceous kind are the most common, and are principally used in the iron works. The thin strata formed by this species of the ore, frequently enclose shells and coralloids. Calcarious and sparry iron-ores of a fine brown red colour,

* Farey, Vol. I. page 391.

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sometimes brightly yellow, and not unfrequently scaly and of a dingy brown hue, are found in amorphous masses near the surface, and filling insulated places. These masses are mixed usefully with other ores, and in the manufacture of steel they are particularly serviceable.

Mode of getting Iron Ore.

At very early periods, the ironstone of Derbyshire was known, and charcoal furnaces and bloomaries were erected in various places for smelting it and converting it into military and useful articles. The first mode of getting this mineral was by open casts or works. The richest ironstone beds have since been traced along the line of these open iron works. When the bassets were exhausted, recourse was had to a mode of working, called *bell-work*. In this was a circular shaft from three to ten feet deep, the lower part spreading out into the form of a cone or bell. This spreads over the ore to the width of many yards, through which the ironstone is collected and raised to the surface.* This space being exhausted, the pit is relinquished and a new pit sunk of a similar depth and form. When the ironstone bed is covered by a solid hard stratum, then the ore is worked in banks in the regular manner of mining; and this method is always preferable where it can be practised, because it not only prevents much waste of ore, but it occasions less injury to the land.

Ironstone.

The ironstone beds at Codnor park, near Heanor, those at Morley park, near Heage, and those at Wingerworth, Chesterfield, and Staveley, are regarded as being the most valuable in the county. At all these places furnaces have been built; and one of considerable magnitude has been constructed at Butterley, near Alfreton. The old charcoal furnaces continued in use until the beginning of the present century, although the immense consumption of wood had become as impolitic as it was expensive. Iron is now made in and near Derbyshire, in tall furnaces only, heated with the coke of pit-coal, and blown by cylinder bellows worked by steam engines. The first of these erected in this county, was that at Morley park, near Belper. These furnaces are of a circular or conical form, having the fire with a blast at the bottom. When the furnace is prepared, and duly seasoned, the process of smelting begins; and fuel, ore and flux, in alternate layers, are continually put in day and night; the fire not being suffered to go out till the furnace wants repair, which is frequently a period of some years. The fuel is generally coke: limestone is the universal flux. The ore is previously burnt in the open air in beds, first with coke, and afterwards with coal slack. It is then broken into small pieces and skreened. Different kinds of iron are produced by varying the proportions of ore, flux and fuel. When the fusion of the ironstone commences, the smelted metal passes through the layers of coke and limestone, and collecting at the bottom of the furnace, is let out into beds of sand, moulded to the forms required. A pig of iron is three feet and a half in length, and of one hundred pounds weight. When first obtained from the ore, the metal is brittle, and void of due malleability. To give it this property it is wrought into bars. The quantity of iron produced annually in this county amounts to between fifteen and sixteen thousand tons.† Derbyshire is the fourth English county in the produce of pig-iron.

* Ironstone is dug up by, what is termed, the dozen, which is about 50 cubic feet, weighing 4½ tons. From 12 to 16 dozen is the estimated average produce of a Bell-pit.

† Beauties of England and Wales, Vol. III. page 306.

List of Iron Furnaces.

A list of the Iron Furnaces in Derbyshire, and the quantity of Iron made at each in 1806.

Places.	*Owner's Name.*	*No. of Furnaces.* *in blast.*	*out.*	*total.*	*Tons of pig-iron made in* 1806.
Butterley, 1792,	Cromford canal, Butterley Company	2	0	2	1766
Chesterfield (Griffin or New Brampton)	E. Smith and Co.	2	1	3	1700
Chesterfield, stone gravel,	Chesterfield canal, Smith and Co.	1	1	2	700
Duckmanton (or Adelphi) 1799,	E. Smith and Co.	1	1	2	900
Hasland (or Grass Hill)	John Brocksop	1	0	1	723
Morley Park,	Francis Hurt (now I. and C. Mold)	1	0	1	700
Renishaw, 1792,	Chesterfield canal, Walker, Appleby, and Co.	1	1	2	975
Somercotes in Alfreton,	Oakes and Co.	1	0	1	1450
Staveley, 1786, near	Chesterfield canal, Ward and Barrow	1	0	1	596
Wingerworth, 1780,	Joseph Butler	1	1	2	819
		12	5	17	10,329

Bar-iron is made from the pig-iron in the following forges:

List of Iron Forges.

Alderwasley, near Wirksworth	Chapel Mill-town	Killamarsh
Bugsworth, in Glossop	Chesterfield	Staveley.
Chapel-en-le-Frith	Codnor lower park	

At most of the above works, they have large *rolling* and *slitting* apparatuses, for making plate iron or bars of different sizes, down to the smallest nail-rod; besides which, there are rolling and slitting mills for such purposes in Derbyshire, in Allsaints in Derby.

Foundries.

Foundries or iron casting-houses for general purposes, are the only remaining branches of the iron trade which we shall here mention; these are found at

Alderwasley Forge	Derby	Renishaw Furnace
Butterley Furnace	Millford in Duffield	Somercotes Furnace
Chesterfield	Morley-park Furnace	Wingerworth Furnace.

Ores of Iron.

Some rake veins in the mountain limestone districts produce ores of iron, but neither these nor the pyrites, &c. which are for the most part not readily decomposable, are worked for smelting. The mines of Derbyshire also produce oxides of iron, or yellow and red ochres, in Ashover, Bradwell, Brassington, Brushfield, Castleton, Cromford, Great Hucklow, Hartington and Wirksworth. Ochre is also found in the shale of Sandy-brook, near Ashbourn. When the water from the coal pits, where decomposing pyrites abound, comes to the open air at the mouths of the soughs, considerable quantities of red ochres are often deposited. At Oakerthorpe in South Winfield, and at other places, this ochre is collected and dried for the colour makers.

Bloodstone.

The *hematites, bloodstone* or *burnishing stone*, is an iron-ore, found only in a highly rounded state, amongst the alluvial matter of these districts. These stones are very hard, and often lie near the surface, and yet when exposed to the action of the atmosphere for a considerable time, they decompose and fall into an ochrey powder. They were formerly in much request by the polishers of metals. In this county, they are mostly found at Measham, Newton Solney, Over-Haddon, Sandiacre, Sandy-brook near Ashbourn, and at Spondon near Derby.

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Copper. *Copper.*—The quantity of copper ore produced in Derbyshire is very small. Pieces about twelve inches in circumference, detached from any vein, have occasionally been met with at Matlock, and others much larger have been found at Bonsal. Cumberland mine at Matlock has produced some specimens, and some tons of copper-ore have been obtained from the Nursery mine at Hopton: it seems, however, probable that the lumps of copper-ore, either found in the vegetable soil or ploughed up, as a very large piece was some time since found on the fourth limestone hills north of Hartington, are to be regarded as accidental alluvial bolders, belonging to regions far remote from Derbyshire.

Zinc. *Zinc.*—The ores of zinc in the Derbyshire mines are of two kinds, the lapis calaminaris, calamine or oxide of zinc; and the blende, black jack, mock ore, or sulphuret of zinc.—Calamine is found in various mines, but principally at Castleton, Cromford, Bonsal and Wirksworth. It is generally discovered near a vein of lead ore, and sometimes the two minerals run by the side of each other, but more frequently, one ceases where the other begins. The calamine is first washed and separated from all adventitious matter, and then calcined in a reverberatory furnace. After this operation, it is again picked, ground into a fine powder, and washed. The quantity annually prepared in this county is about 500 tons.

Sulphuret of Zinc. *Blende, black jack* or *mock lead,* is the native sulphuret of zinc.—It is not abundant in this county, and little of this ore has been dressed for sale in Derbyshire. Formerly the miners did not consider mock-ore or blende to be of any value, and it was either left in the mine or thrown away on the hillock amongst their vein-stuff.

Manganese. *Manganese.*—The oxide or black friable ore of manganese is principally found in Derbyshire and called *black wad.* It occurs in the mines at Alport, Brushfield, Elton, Great Longsdon, Hartington, Hopton, Matlock bath, Monsal dale, Parwich, Winster and Yolgrave.* "The ore of manganese," says Dr. Ure, "which is known in Derbyshire by the name of *black wad,* is remarkable for its spontaneous inflammation with oil. It is of a dark brown colour, of a friable earthy appearance, partly in powder and partly in lumps. If half a pound of this be dried before a fire, and afterwards suffered to cool for about an hour, and it be then loosely mixed or kneaded with two ounces of linseed oil; the whole, in something more than half an hour, becomes gradually hot, and at length bursts into flame. This effect wants explanation: it seems, in some measure, to resemble the inflammation of oils by the nitric acid." This curious property in the black wad, was first discovered, about the middle of the last century, by the ingenious Mr. Roe, a painter at Derby.—Black wad has been found to be very useful as an oil colour in house and ship painting. It has been much employed for the latter purpose, particularly for the navy. This application of the ore of manganese is ascribed, by Mr. Pilkington, to Mr. Dawson of Winster, who is stated to have made his discovery known to lord Sandwich, then first lord of the admiralty. There is a kiln or furnace for preparing this ore for these purposes, at Wensley, which is a village

* "Calciform oxide of manganese, called black wad, is found in *pipe works,* of blackish brown and yellow colours." *White Watson's Delineation,* page 67.

not far distant from Winster.—At Carsington hill mine, the brown or rusty ore of manganese is said to occur in small quantities.

Silver.

Silver.—This precious metal, although it is frequently combined with the galena or sulphuret of lead, yet the quantity is too small to render it worthy of attention. At the Ball-eye mine in Bonsal,* and at some other works, the process of refining the silver, or separating it from the lead ore, was formerly pretty regularly practised, and the average of the silver to the lead is said to be about two grains in the pound troy. The waste of lead in the process was very considerable, and the process itself was expensive, and the practice has been wholly discontinued.

Grey Ore of Antimony.

Arsenic, antimony and *molybdenum,* are three metals that are occasionally found in different specimens of the lead ore in this county, but in very small quantities. The grey ore of antimony, in convergent needle-like crystals, have been found, though very rarely in the Gregory mine, Ashover.

Limestone.

STONES. *Limestone.*—Already have we observed that limestone in various strata, and of different qualities in the same stratum, is abundant in this county. Limestone is of various colours, as white, grey, yellow and red, which again vary in their depth of shade or tint; and it is also of different texture or consistency, as compact, porcellanic, granular, crystalline, shelly, magnesian; and there is also pozolanic or watery limestone, and the stinking limestone or swine-stone. At Buxton, Peak forest, Stoney Middleton, Calver, Wirksworth, Matlock and Ticknall, the limestone is in much request for agriculture, and for this purpose great quantities of it are sent even into Cheshire and Lancashire. At Crich there are several kilns employed in burning limestone. When calcined it is remarkably white, and is much valued for ceilings and ornamental purposes. At Ticknall and Kniveton the limestone is of a very dark colour and sets very strongly. At Hopton there is another variety of limestone of a light colour: it is hard, but does not bear a polish: it abounds with small fragments of entrochi, and is much used for chimney-pieces, floors and stair-cases.

The following are the principal LIME QUARRIES *in Derbyshire.*

List of Lime Quarries.

Agnes Meadow, near Atlow, shale limestone, water L.
Alport, near Yolgrave, 1st lime
Ault Hucknal, W, blue, in the yellow L.
Ashford, Shale L. water L.
Ashover S (NW formerly) and at Mill-town, 1st lime
Atlow, shale L. water L.
Bakewell, 1st lime, W and NE, shale L. N and NW.
Barlborough E, yellow L.
Barmoor, in Peak forest, 1st and 3rd, rail-way of Peak forest canal
Belph, near Whitwell, white in the yellow L.
Birchwood Park in Roston, grey in the yellow L.
Bolsover N, blue in yellow L.
Bonsal, 1st, 2nd and 3rd lime
Bradburne, grey shale L.
Calke, Dimins-dale E, in park formerly, grey in yellow L.
Castleton, 4th lime
Calver-peak, near Stoney Middleton, 1st lime
Clown, red ponderous, in yellow L.
Crich, N of the town, 1st lime, grey, SE black and grey, rail-way of Cromford canal
Cromford, 1st lime, Cromford canal
Crowdycote in Hartington, 4th lime
Dove-hole, in Peak forest, 4th lime, rail-way of Peak forest canal
Edingtree, near Hope, 1st lime
Eyam, 1st lime
Glapwell, near Ault Hucknal, yellow L.
Great Hucklow, near Eyam, 1st lime
Grin Hill, near Buxton, in Hartington, 4th lime
Haddon, SW of the Hall, near Great Rowsley, 1st lime
Hall-field, near Atlow, shale L. water L.
Hassop, near Bakewell, 1st lime
Hognaston, shale L.

* "The sulphuret of lead procured at Ball-eye or Bawlee mine, about the year 1749, appears to have been rich in silver, containing 20 ounces per ton. Several vessels were made of this silver, of which a tankard, salver, and two small tumbler cups, are in the possession of Mr. Milnes of Ashover, with a specimen of the ore." *Ibid.* page 59.

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List of Lime Quarries.

Knitaker, near Barlborough, blue in yellow L.
Kniveton, grey and black shale L. water L.
Matlock, town and bridge, 1st lime
Newton-grange, near Tissington, shale L. water L.
Palterton, near Bolsover, blue in yellow L.
Peak Forest, NW of the town, 4th lime
Pindale in Castleton, 1st and 3rd lime
Sparrow-pit, in Peak forest, 1st, 3rd and 4th lime
Stoney-Houghton, near Pleasley, blue in yellow L.
Stoney Middleton, 1st lime
Ticknall E, grey in yellow L. water L.
Tideswell, 2nd lime
Turnditch S, shale L. water L.
Walls N, in Whitwell, blue in yellow L.
Wensley, near Darley bridge, 1st lime
Whitwell (Bakestone moor) red in yellow L.
Wild-park, near Muggington, grey in yellow L. water L.
Wirksworth (Yoke-cliff) 3rd lime, S and N of the town.

Marble.

Marble.—That elegant calcareous substance, called marble, is found in various parts of the High and Low Peak. It is of various kinds, and is named either with reference to its colour, as the white, grey, dove, blue, black, marble; or the figured, bird's eye, dog-tooth or muscle, entrochi, shelly, and breccia marble. The black marble abounds at Ashford, but it is also found at Wirksworth, Bakewell and at Little Longsdon. That at Ashford may be obtained in very large blocks: it is of a very deep black, and of a close and solid texture: it is capable of receiving an extraordinary high polish, so as to reflect objects as brightly as a mirror.*——The grey marble, mottled and veined, is found in a variety of places: a large quantity is got in the neighbourhood of Monyash. This kind of marble is remarkable for the diversity of shade in its prevailing tint; some of it being of a very pale grey colour, and some deepening into a more azure hue. The former is rendered extremely beautiful by the number of purple veins which spread upon its polished surface, in regular and irregular branches. The chief ornament of the mottled grey marble is the number of entrochi,† with which it abounds. The longitudinal and transverse sections of these fossil animals, produce an almost incredible diversity of figure in each section. In general, the more superficial the bed, the lighter is the colour of the marble, and the more abundant are the entrochi.—Purple veined marble is procured at Ricklow dale, near Monyash, and a variety of the entrochal marble is found near Wetton; the ground of which is more inclined to blue, and the sections are small. This is called the bird's eye marble.—Besides these calcareous marbles, there is a bed of ironstone, eight or ten

* "The luxuriancy of the annual meadow grass *(poa annua)* is characteristic of the black beds which afford the black marble, so much esteemed for chimney-pieces, monuments, tables, &c." *White Watson's Delineation.*

† "Entrochal limestone abounds with petrifactions (shells, &c.) chiefly entrochites, as the even jointed, warted, the ring jointed, which are accompanied with anomites, as the semi-reticulated, trigonal, and prickly; with various corals, as the flower-like madreporite, cespitose madreporite, the linked turporite, and several others.—On the cheeks of open fissures, and on the surface of the rock, these petrifactions are frequently left raised, the matrix being destroyed: the entrochi are sometimes detached and much disjointed, when they are called Fairy, or Cuthbert's beads. They are frequently found with the outer parts destroyed, and only the central ones remaining, which are become silicious, and somewhat in the form of screws, termed screw stones." *(White Watson's Delineation)*—These entrochi are frequently called eucrinites; they are fossil zoophytes with a round and jointed stem, and round jointed arms or branches surrounding the mouth, and these arms or branches, when closed, bear some resemblance to a lily, a cap, a turban, &c. Hence they are called the lily-eucrinites, or entrochi, &c. Some of the strata, in the upper limestone bed, seem almost entirely composed of the fossil remains of eucrinites. (See Bakewell's Geology.)—Mr. Farey (Vol. I. p. 272.) observes, that vast assemblages of entrochi occur in the first limestone forming the figured, the grey, the bird's eye, and other marbles. In some places, where these entrochian beds happen to basset, under a thickness of rubble and loose soil, blocks of it are ploughed up, completely changed to *chert*, except the shells which are decomposed and gone, the casts of the inside of the entrochi being denominated *screws*, but which they little resemble, the flutes being square to the axis, as though turned on a lathe, and not inclined spirally like a screw.—Some few beds in the second limestone contain entrochi.—In the third limestone, very large and smaller sized anomia shells, madrepores, &c. are found.

inches thick, abounding with the impression of muscle shells, called dog-tooth or muscle marble, which is polished and introduced with good effect into chimney-pieces; it is wrought into various elegant and useful articles, as standishes and ornamental vases, &c. The vein of this stone runs between the grit rocks in the coal district at Tupton and other places.—The black and grey marble agree in several properties: they are both calcareous: they effervesce with mineral acids, and are corroded by vegetable acids. The specific gravity of the black marble, compared with that of the grey, is said to be as 12 to 13. Marble.

A list of the MARBLE QUARRIES *in Derbyshire.*

List of Marble Quarries.

Ashford W, black, shale limestone
Ashover (Lexley quarry) grey, entrochi, 1st lime
Bonsal, grey, entrochi, 3rd lime
Buxton (Mill dale and Lover's-leap) white, 3rd and 4th lime
Cressbrook Dale, near Little Longsdon, black, 3rd lime
Cromford (Deanwood dale) grey, entrochi, 1st lime
Foolow S, grey, entrochi, 1st lime
Great-rocks Dale, near Tunstead, white granular, in a wide vein in 4th lime
Hassop, grey, entrochi, 1st lime
Matlock (boat-house) grey, entrochi, 1st lime
Monsal Dale, near Little Longsdon, black, 2nd lime
Monyash (Brecks) blue, entrochi, 1st lime
———— (High Low) bird's-eye (entrochi) 1st lime
———— (Ricklow-dale and Henmore) grey, figured (entrochi) 1st and 2nd lime
———— (Ricklow-dale) purple-veined, entrochi, 1st lime
Slaley SW, in Bonsal, anomia shelly, 4th lime
Snitterton S, black, 1st lime, or shale L.
Tideswell, ½ m. N, black, 2nd lime
Wirksworth, 1 m. W, black, 3rd lime.

The quarries of entrochial marble at Monyash are chiefly the property of the Duke of Devonshire and of Mr. Cheney. They are farmed and worked by Mr. Lomas and Mr. Brown. The fine black marble quarries at Ashford belong to the Duke of Devonshire; they are worked by Mr. Brown. The quarries near Bakewell are the property of the Duke of Rutland; we believe that they are wholly worked by Mr. Lomas.—Chimney-pieces are made by Mr. Brown, at different prices, from 30*s.* to £50. and £60. and upwards.

Chert.—Hornstone, petrosilex, or, as it is more commonly called, chert, forms the uppermost bed in the compact shell limestone or entrochial marble. It is of a greyish white texture and splintery fracture, and is not unfrequently excavated in small cellular parts, containing in the interstices of their lining, minute crystals, formed round asphaltum, and sometimes holding water. This chert is much used in the potteries. Chert.

> " Gnomes, as ye now dissect with hammers fine,
> The granic rock; the noduled flint combine;
> Grind with strong arm (the circling *chert* betwixt)
> Your pure *ka-o-lins* and *pe-tun-sees* mixt." *Darwin.*

Some sorts of chert has been formed into millstones, as an excellent substitute for French burr-stones. Chert pervades, more or less, all the marble quarries. In the first limestone rock, near the top, layers of the black chert nodules occur: they are similar in their arrangement to the nodules of flint in chalk, which they very much resemble. In fewer instances, layers of the limestone seem to be converted into white chert, called china stone. This last is sent off in very considerable quantities to the Staffordshire potteries, and to various flint mills, chiefly from the northern end of Bakewell, and from Little Longsdon; and near Haddon hall, there

CHAP. 2. Chert.

is a considerable mass of chert in a lime quarry. On Masson hill, and on the Over-Haddon pastures, the superficial beds of the second limestone are converted into chert; the upper part being curiously and regularly cracked. All the entrochial beds, in the second limestone, are subject in places to interrupting masses of white chert or china stone. Of this there is a remarkable quarry, north-east of Bonsal church, called the Stebben bed; and this is found to cover beds of black marble, of different degrees of consistency, extending down Monsal dale to Longsdon and Tideswell.—The upper beds of the third limestone are often dark coloured, and contain layers of black chert in nodules. Like other limestone, parts of its strata seem converted into white chert or china stone. The black chert is seldom applied to any specific purpose, and very seldom used for the repair of roads. The loose porous blocks, which have cavities generally occurring from the decomposition of organised substances, are denominated screw-stones. These are used for *burrs*. At Alport, near Yolgrave, the decomposition of the tufa assumes the character of chert, but it wants some of its serviceable qualities as a china stone.—The china clay is derived from the chert. It is of a beautiful white colour. The flints are brought by canals from the limestone and chalk districts.

Freestone.

Freestone.—The freestones, or those capable of being broken or hewn with equal ease, or nearly, in any direction, for use, and thence often called building stone, or ashler (in distinction from beddy stone, flags or paviers, and slate or tile stones, which will split only in one direction, or canks, which are too hard and brittle to be cut) are in this district all silicious or sand stones, except occasional beds in some quarries of the limestone strata, and the tufa of Matlock bath, &c. used in buildings there and at Alport, &c.

The following is a list of FREE *or* BUILDING-STONE QUARRIES *or Delphs in Derbyshire.*

List of Free or Building-Stone Quarries.

Abbey-dale (Park bank) in Norton, 4th grit rock
Allestree SE, grit, in the red marl
Alport, in Hope Woodlands, shale grit
Alport in Yolgrave, tufa from an ancient spring
Alton in Ashover, NW, white, 3rd grit: E (Britonwood) 4th grit
Alton in Wirksworth, shale grit
Ashley-hay in Wirksworth, shale grit
Ashover E, 1st grit: W (Amber-hill or slack) 1st grit
Bakewell-edge, E of the town, shale grit
Barlborough SW (Marston moor) 15th grit
Beeley, fine grit
Beighton S, 12th grit
Belper N (Weir, and New Swinney) 1st grit
Belper-gutter (Hall lane and Shaw lane) 2nd grit
——————— (Hunger hill) 3rd grit
Belph in Whitwell, white lime, in yellow L.
Birchover NE, near Winster (moor) 1st grit
Birchwood-moor in Norbury, white gravel rock
Birdholme, S of Chesterfield, 10th grit
Blackwall NE, in Kirk Ireton, shale grit
Bolsover Moor, E NE of the town, yellow lime
Bradway (Hempyard-lane) in Norton, 6th grit, blue
Brailsford, N of the church, white grit, in red marl
Bramley-moor, W SW of Eckington, 9th grit
Brassington (Harboro rocks) yellow grit of 3rd toadstone
Breadsall Moor N NE, salmon-coloured grit
Bretby, ¼ m. N, and E of Hall, grit, in red marl
Brimmington N, 8th grit; and W (Wildens mill) 8th grit
Bull-bridge in Crich, shale grit: by Cromford canal
Butterley in Ashover (Raven's nest tor) shale grit
Buxton NW (Corbar quarry) shale grit
Calke E, white gravel rock
Callow (Hascar side) in Wirksworth, shale grit
Calow in Chesterfield (Upper lane) 6th grit; E end of the town, 10th grit; and near Adelphi furnace, 12th grit
Chapel-en-le-Frith NW, shale grit: by rail-way of Peak forest canal
Chapel Milltown in ditto, shale grit: rail-way ditto
Charlesworth in Glossop, 3rd grit
Chevin Top, S SW of Belper, 1st grit
Chilcote (Town, and Honey hill) grit, in red marl
Chinley (Churn) in Glossop, 2nd grit
Clay-cross W, in North Winfield, 9th grit
Clifton S, near Ashbourn, grit, in red clay
Codington (Carr) in Crich, 1st grit: by Cromford canal
Coxbench in Duffield, 3rd grit
Cromford (Stone-house, and moor) 1st grit, salmon-coloured
Culland in Brailsford, grit, in red marl
Dale-Abbey (Hag) salmon-coloured: and (furnace) grit
Deer-leap in North Winfield, 4th grit

List of Free or Building-Stone Quarries.

Dronfield, 9th grit
Duffield Bank NE, 1st grit
Eckington (Marsh) W SW of the town, 9th grit
Edensor S (in Park) shale grit
Edge-moor in Crich, 1st grit
Farlow-green in Belper, 1st grit
Foremark park, one-third mile W, near Cadhouse lane, grit
Froggatt E (Froggatt edge) 1st grit
Gorsey Bank in Wirksworth, grit
Hadfield in Glossop, 2nd grit, blue hearted
Hardwick-hall SW, sand-stone, under yellow lime
Hartshorn (Town, and Corkley) grit
Hazlewood-hall in Duffield, 1st grit
Hazlewood-lane, in Duffield, shale grit
Heage (Town, and W) 4th and 5th grit
Higham in Shirland, 10th grit
Hollingwood-common W, near Brimmington, 10th grit
Hopping-hill in Duffield, 1st grit
Hopton-Wood, in Middleton by Wirksworth, by Via-Gellia dale, 4th lime
Horsley N, 5th grit
Killis Farm (Highwood) in Horsley, coarse 3rd grit
King's-Newton in Melbourn, grit, in red marl
Kirk Ireton Town, coarse shale grit, and N (Copt-holly) shale grit
Langley (Kirk) N, grit, in red marl
Lea-wood W (White Tor) near Cromford bridge, shale grit; and SE (Knowl) 1st grit
Little Eaton (Common, 2 quarries) salmon-coloured grit, some coarse: rail-way branch of Derby canal
Little Eaton NW (Iron's wood) 1st grit: and near ditto W, shale grit
Long Duckmanton, ¼ m. SE, grit
Mackworth, grit, in red marl
Makeney in Duffield, 1st grit
Matlock, shale grit, and 1st grit
Matlock Bath, tufa, from the hot spring
Melbourne (Wood-houses) grit, in red marl
Millford in Duffield, 1st grit
Morley Moor, NW of the town, salmon-coloured grit
Morton, ½ m. S, grit
Mossborough (Noe hill) in Eckington, 9th grit
New Mills in Glossop, 3rd grit
Oneston (Hardhouse bank) in Dronfield, 9th grit
Overton (Gregory) in Ashover, 1st grit
Pentrich (Common) 11th grit; and (Town) 12th grit
Pilhough, near Great Rowsley, shale grit
Pudding-pie Hill, W of Brampton, 5th grit
Pye-bridge, near Somercotes, in Alfreton, 11th grit
Ravenstone, grit, in red marl
Raworth in Glossop, 4th grit
Renishaw E NE (Burley) 10th grit, by Chesterfield canal
Repton, ⅔ m. SE, and two-thirds m. W, grit, in the red marl
Ridge-way, near Bull-bridge, in Duffield, 1st grit
Ridgeway SW (Lum-delph) in Eckington, 9th grit, blue hearted
Rowlee in Hope Woodlands (Crookston Tor) shale grit
Shirland, 12th grit
Shirley, grit, in red marl
Shuttlewood Common [Nunnery] in Bolsover, grit
Simondley E, in Glossop, 2nd grit
Slaley SW, in Bonsal, 4th lime, anomia
Smisby [Pistern hill] grit, in red clay
Snelston, ½ m. W, white gravel rock
South Normanton, grit
South Winfield [Town, and Cobourn] 4th grit
Spitewinter, near Stanage, in Ashover, 2nd grit
Stanage, N of Ashover, [Rocks] 3rd grit; and [White-edge] 2nd grit
Stanley S, in Spondon, grit
Stanton by Bridge [N] coarse grit; and [SE] fine grit, in red clay
Stanton by Dale E, salmon-coloured grit, and in town
Stanton Moor, near Winster, 1st grit
Stanton-ward, by Newhall, grit
Starkholmes in Matlock, shale grit
Steetley, NE of Whitwell, white crystallized, in yellow lime
Stretton [Bear] near Higham, 10th grit
Sutton in Scarsdale [Owlcoats] grit
Tansley, near Matlock, 1st grit
Tapton SE, near Brimmington, 5th grit
Thorney-Ley in Chapel-en-le-Frith, shale grit
Tibshelf NE [Hurst] grit; and N [Cock-top] grit
Ticknall [E, in Repton P.] grit, in red clay
Upper Town in Ashover [Roches] 1st grit
Walton [Common] in Chesterfield, 4th grit
West Hallam [Town] grit
Weston on Trent [NW of Church] grit, in red marl; and SW [Cliff] grit, in red marl, by Trent and Mersey canal
Whittington NE [Glass-house common] 9th grit; and W SW [Sheep-bridge] 10th grit
Whitwell S [Bakestone moor] granular yellow lime
Willesley, ¼ m. S, grit, in red clay
Wingerworth W [Bole hill] 4th grit
Winshill, near Newton Solney, grit, in red marl
Wirksworth [Gorsey-bank] shale grit
Woodseats in Norton [Meadow head] 4th grit
Woodthorp, near Staveley [N] 13th grit; and [Damstead] grit.

Building Stone.

At the quarry at Lea wood, blocks of building stone are sold at 6*d.* per foot cube: at Belper it is sold at 8*d.*; and at the Priory, near Breadsall, at 10*d.* This last is a very fine grit: it is considered the best stone in England for solidity, and for being wholly free from clay; it will also stand fire better than any other. The other prices in the county are stated to be, 7*d.* per cubic foot at Duffield bank; 5*d.* at Little Eaton; and generally 6*d.* at Hathersage, Ashover, &c.

The following is a list of STONE SAW-MILLS *in this County.*

List of Stone Saw-Mills.

Ashford, at W end of the town [by water]
Bonsal, S of the town [by water]
Derby, in St. Alkmund's P. [by steam]
Lea Wharf, near Cromford E [by water]
Wirksworth town [by steam].

Several gritstone and sandstone rocks, in the coal district, have argilla-

CHAP. 2. ceous cements; but the *fourth* gritstone rock produces an excellent building stone when pursued to a proper depth below the surface. The stone from the yellow limestone strata is generally very durable, and so is that from the *fourth* lime. The shale freestone will stand the weather tolerably well, and in some quarries, this is variegated with concentric streaks of an orange-colour or dingy red, so as to have a pleasing effect. Chimney-pieces are sometimes made of this stone from Callow quarry, Hascar side, and are incorrectly called marble.

Shale Freestone.

Paviers' Flags.

Paviers' flags or layers.—There are flat beds of stone which naturally split up or rise in the quarry, so plane and flat, as to serve for foot-paths, yards, out-houses, and even dwelling houses; these are called flag-beds. Very little labour, and often none, is applied to the facing of them. The following are the principal delphs or quarries of this description:

List of Flag Stone Quarries.

Abney in Hope, shale grit
Beeley Moor, 1½ m. E of Great Rowsley, 2nd grit
Bradway [Hempyard-lane] in Norton, 6th grit, blue
Brampton [Three Birches] NW, 6th grit; and [Pudding-pie hill] W, 5th grit
Brassington Common, N of town, 4th lime, grey
Breadsall Moor, N NE of town, salmon-coloured grit
Bugsworth in Glossop, 3rd grit, near Peak forest canal
Bull-bridge in Crich, shale grit, by Cromford canal
Calow in Chesterfield [Upper lane] 6th grit
Chinley [Churn] near Chapel-en-le-Frith, 2nd grit
Clay-cross in North Winfield, cank in 9th grit, rhomboidal
Denby, ¼ m. SE, and S of the church, cank in grit, rhomboidal
Dronfield N, cank in 9th grit
Eckington [Marsh] W SW, 9th grit
Edensor S [in Park] shale grit
Eyam Woodlands [Wet Wivens] shale grit
Foolow S, near Eyam, 1st lime, entrochi
Glossop NE [the Low, and Charles Lane] 1st grit
Grass-hill SE in Hasland, in 12th coal, shale
Green-hill in Norton, 6th grit
Harston S, in Matlock [White Tor] shale grit
Heage NE, 5th grit
Holm-gate in North Winfield, 6th grit
Kniveton NE, shale lime, entrochi
Long Duckmanton, ¼ m. SE, grit
Monsal-dale, near Little Longstone, 2nd lime, black
Monyash NE [High Low] 1st lime, entrochi
New Mills in Glossop, 3rd grit
Pentrich Common NW, grit
Raworth in Glossop, 4th grit
South Winfield [Town, and Cobourn] 4th grit
Stanage, NW of Wingerworth, 3rd grit
Stoke in Hope, shale grit
Tapton SE, near Brimmington, 5th grit
Thornsett in Glossop, 3rd grit
Unthank W, near Holmsfield, 4th grit
Whitfield in Glossop, 1st grit
Whittle [Crowther] in Glossop, 3rd grit
Whitwell S [Bakestone Moor] red in yellow lime
Wingerworth W [Bole hill] 4th grit
Woodseats in Norton [Meadow head] 4th grit.

At these quarries, the price of paviers' flags, squared, is from 1*s.* to 20*d.* per superficial foot. Paving stones are also sawed from blocks of freestone, at the sawing mills.

Among the quarries which furnish natural pavier-stones, those of the *fourth* grit rock are most perfect. Some few of these stones are adapted for grave-stones, mile-stones, &c.

Slates or Tile-Stones.

Slates or tile-stones.—Most of the grey slate of this district abounds with *mica* in minute plates, forming layers at the joints where the stone most readily parts. In numerous instances these joints are remarkably plane and smooth, but in others the surface of the slates is marked with waves and curves. The principal slate quarries or delphs are the following:

List of Slate Quarries.

Abney in Hope, shale grit
Ash-gate in Brampton, 7th grit [waved]
Bakewell, E of the town [Edge] shale grit
Bradwell, 1 m. E, shale grit
Brampton NW [Three Birches, and Grange bar] 6th grit: and W [Pudding-pie hill] 5th grit
Bugsworth in Glossop, 3rd grit
Bull-bridge S of Crich, shale grit: by Cromford canal
Calow in Chesterfield, grit
Chinley [Churn] near Chapel-en-le-Frith, 2nd grit: near Peak forest rail-way
Chunall in Glossop, 1st grit
Dronfield S [Hallows] 9th grit
Eyam Woodlands [Wet Wivens] shale grit
Glossop NE [Low, and Charles lane] 1st grit
Hanley in North Winfield, 4th grit
Harston S, in Matlock [White Tor] shale grit
Hathersage E [Cam height] shale grit
Hayfield [White Knowl] shale grit
Heage NE, 5th grit

List of Slate Quarries.

Loco-lane S, in North Winfield, grit
Matlock W, 1st grit
Nether Padley NE [S of the Robin Hood] 2nd grit
New Mills in Glossop, 3rd grit
Pentrich Common NW, grit
Raworth in Glossop, 4th grit
Stanage, NW of Wingerworth, 3rd grit
Stoke in Hope, shale grit
Sutton in Scarsdale W [Wood-nook lane] 11th grit
Tansley SW, in Matlock, 1st grit
Tapton SE, near Brimmington, 5th grit
Thornsett in Glossop, 3rd grit
Unthank W, near Holmsfield, 4th grit
Walton W SW, in Chesterfield [Slate-pit dale] 4th grit
Whitfield in Glossop, 1st grit
Whittington N [Swineslait] 9th grit [waved]
Whittle in Glossop [Crowther] 3rd grit.

Prices of Slate.

Slate is sold by the rood, or in quantities sufficient to roof in 44 square yards. The price varies from 54*s.* to 70*s.* per rood. At Cobourn quarry, in South Winfield park, there is a sort of eaves-slating, which is sold at 1*s.* per yard; and these slates run nearly on an average one yard in height. —There are lamellar gritstone of this class, capable of sustaining intense heat; these are formed into round plates called pye, pot, or lump stones, and are used in the iron forges. Larger stones of the same nature are also prepared for the purpose of baking oat cakes upon, called *bake stones*. At Cobourn quarry, and at Pentrich common quarry, *ridge stones* are prepared, sawed out like an angular trough. Of the freestone, there are made at the quarries, stack posts and caps for forming rick-stands.* The most perfect freestones are required for making cisterns or troughs. A particular bed of the *first* grit rock is found porous at Stanton in the Peak, and at Birchover on Stanton moor, well adapted for filtering cisterns.

Several of the gritstone rocks, interposed between the coal measures, contain beds of uniform and sharp grit, the cement of which, though hard and firm, does not fill the interstices between the particles or grains of silex. These are used for making *grindstones* for the use of cutlers, edge-tool makers, &c. These grindstones form a considerable export by the canals of Derbyshire. The large coarse grindstones, made at Gregory quarry in Overton, have been in great demand. The following are the quarries where grindstones are made:

List of Grindstone Quarries.

Ashover NW [Hill quarry] 2nd grit, middling coarse
Beeley SE [Moor] 1st grit, coarse
Belper SE [Hunger-hill] 3rd grit, fine
Bolsover NW [Nunnery] on Shuttlewood common, middling
Bradway in Norton [Hempyard-lane] 6th grit, whitening
Breadsall N NE [Moor] salmon-coloured, middling
Buxton NW [Corbar] shale grit, fine
Darley E [Moor] 1st grit, coarse
Glossop E [near Moss-lee] 1st grit, coarse
Horsley, N of Derby, middling
Little Eaton NE [Common] salmon-coloured, middling; and NW [Iron's wood] 1st grit, coarse
Milford, S of Belper, 1st grit, coarse
Morley N W [Moor] salmon-coloured, middling
Overton SW, in Ashover [Gregory] 1st grit, coarse, large
Ridgeway SW, in Eckington [Lum-delph] 7th grit, middling
Stanley S, in Spondon, fine
Stanton by Dale E, middling
Stanton in the Peak N [Moor] near Winster, 1st grit, coarse.

At Morley moor quarry, grindstones are made from 18 inches to four feet in diameter, at about 40*s.* per ton.

Whetstones and Scythe Stones.

Some particular beds of gritstone furnish whetstones and scythe-stones, of which very considerable quantities are sent into the southern counties, from within a few miles north-east of Derby. The best scythe-stones are made at Hunger-hill, Belper; Birchover, near Winster; Breadsall; Coxbench; Darley moor; Duffield bank; Heage; Holbrook; Horsley; Little

* At Morley moor quarry, at 2*s.* 4*d.* to 2*s.* 8*d.* At Stanton-by-Bridge, 3*s.* 6*d.* per pair.

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Scythe Sticks.

Eaton;* Melbourn; and Morley moor.—At Alton in Ashover, considerable numbers of scythe sticks are made, by collecting the sharp grit sand, and gluing it on to flat pieces of wood. Similar scythe sticks are made at Melbourn.—Whetstones of a close fine and sharp grit are made at Alton, Bolsover, Codnor, Heage, Pentrich, Sandy-brook near Ashbourn, and Woodthorpe. The more compact specimens of the ironstone from Codnor and Woodthorpe are called *hones*.

Cank Stones.

Cank stones are found in the coal districts, and are very serviceable for making and repairing roads.

Quartz Crystals.

Quartz crystals.—Semi-transparent grains of quartz, or imperfect crystals of that substance, from three quarters of an inch in diameter to minute atoms, which the eye unassisted by glasses can scarcely perceive, enter into the composition of the numerous grit rocks and stone beds of this district. At the lime quarries, Mill-town, Ashover, cavities or tick-holes are frequent in the first limestone rock, which are lined with hexagonal, pyramidical quartz crystals: similar crystals have been found at Matlock and at Tideswell.

Derbyshire Diamonds.

The Derbyshire *diamonds* are small detached and perfect crystals of colourless quartz, of an hexagonal prism, terminated by pyramids, and others are of a light rose colour. They are occasionally found at Bakewell, Brassington common, Buxton, Castleton, and near Priestcliff, Millers dale.

Chalcedony, hornblende, jasper, zeolite and *terra-verte* have been found imbedded in toadstone; and *onyxes* have been found near Bakewell.

Calcareous Concretions.

Calcareous concretions are found in vast abundance in almost every part of the Peak, there being hardly a single cavern but what is lined with incrustations of this kind, and which assume almost every possible form, and are resplendent with an amazing variety of colours. The *transparent calcareous spar* is astonishingly variable in appearance; yet, when minutely examined, is discovered to originate wholly from one form, the rhombic; though its various combinations can hardly be enumerated. Mr. Bergman observes, that they consist of a *tessara*, or oblique parallelopiped, all the planes of which are rhombs of such a kind, that the obtuse angles are equal to $101\frac{1}{2}$ degrees, and the acute to $78\frac{1}{2}$ degrees. Crystals of the most opposite form may be produced by a compound accumulation of similar parallelograms. The primitive rhomb is rarely found: it is generally on a dark bituminous limestone, with pearl spar and selenite; the primitive rhomb passing into numerous modifications: the following are among its varieties. *Dog's tooth spar*, forming double hexagonal pyramids, joined base to base. Hexagonal crystals of spar, terminating with pyramids of the primitive rhomb: others, terminating with the primitive rhomb truncated, and with the lenticular pyramid; others with a variety of terminations, forming pyramids, with three, six, twelve, fifteen, and more faces: hexagonal prisms of a high topaz colour, terminating variously: fibrous and mamellated spar: macles, or twin crystals; some exceedingly rare, and greatly diversified: opaque, snow-white spar, crystallized in double hexagonal pyramids, joined at their bases: rose-coloured spar, amorphous: stalactites, presenting a variety of beautiful colours, with the appearance of

* At Little Eaton, the Scythe-stones are sold at from 10*s*. to 12*s*. per long hundred.

agate veins; others with their terminations crystallized: green stalactites, very rare. Several of the other kinds are now become scarce. CHAP. 2.

The fluor spar, or, as it is here termed, *blue john*, is frequently confounded with calcareous spar, from which, however, it differs essentially. It contains an acid, the most penetrating and corrosive of any we are yet acquainted with, and which is very different from the carbonic.* This, from its peculiar properties of corroding glass and silicious substances, has been employed in France for engraving glass plates, and the specimens obtained are reported to be singularly beautiful. When moderately heated, it becomes phosphorescent; in a strong heat, it melts of itself, and emits fumes that are extremely noxious; by a certain degree of heat, its blue colour is changed into a fine red, or reddish purple; but with a greater heat, all its colours are discharged, and it becomes white. Its extreme beauty has occasioned it to be manufactured into a variety of elegant forms, such as urns, vases, columns, &c. The only mountain where it can be obtained in sufficient abundance and quality for the purposes of manufacture, is situated to the west of Castleton, between Mam Tor and the eminences that compose the Long Cliff; but even here it is less plentiful than formerly, and its price has lately been advanced to £40. per ton. The mountain itself appears like an assemblage of vast rocks of limestone, without connexion or regularity, and is full of openings or caverns of immense depth. The fluor is found in pipe veins of various directions; in caves, filled with clay and loose adventitious substances: it appears in detached masses, bearing every appearance of having been broken from the limestone, on which it seems to have been formed; for it has frequently that substance for a nucleus, around which it seems first to have crystallized, and afterwards increased by accumulation: frequently, however, the centre is hollow. Some of the pieces of fluor are a foot in thickness, and have four or five different and distinct veins, but such large pieces are very rare; in general, they are only about three or four inches thick, some having only one strong vein, while others present many, but smaller: those that display a geographical figure, like a coloured map, are most rare and valuable. The prodigious variety and singular disposition of the veins, and the sudden contrasts of the finest colours which occur in this substance, render its beauty nearly unparalleled. The colouring matter has by some been supposed to be iron: Mr. Mawe imagines it to be asphalt, containing pyrites in a decomposed state; but observes, there are many singular varieties that have not undergone any analysis. The account of the chief varieties of this substance we shall extract from that gentleman's publication. Fluor Spar.

"Fluor, or *fluate of lime*, generally crystallizes in the cube and its modifications; rarely in the octahedral, and still more rarely in the dodecahedral form. The chief varieties are the following: Fluate of Lime.

"Water-coloured crystals of cubic fluor, studded with bright pyrites: the accumulation of crystals frequently covers the pyrites with a pleasing effect. Very large and transparent cubes of fluor, with pyrites in the in-

* "The fluoric acid is easily obtained by pulverising the fluor, and putting it into a leaden retort, adding its weight of any of the mineral acids. Apply a gentle heat, and the fluoric acid will appear as gas, which may be caught in a vessel of the same materials as the retort." *Mineralogy of Derbyshire.*

CHAP. 2. Fluor.

side, accompanied with blende and lead ore. Blue fluor, of a violet colour, in perfect cubes, with cubes in the interior. Amethystine and topazine fluors: the latter of a fine yellow, with internal crystals of pyrites. Dark blue fluor, with the edges bevelled on each side. Blue fluor, with one bevelled edge, or a plane on each edge. Blue fluor, with four-sided pyramids on each face. Blue fluor, indented and perforated. Fragments of octahedral fluor. Ruby-coloured fluor, in perfect cubes, on limestone. Granulated or sandy fluor, of a rose-colour.

"Compact fluor in masses, formed on limestone, or in nodules. This seems an accumulation of cube upon cube, forming prisms, the surface of which are crystallized. Some of these masses, which are seven or eight inches thick, are separated in two or three places with a very thin joint of clay, scarcely thicker than paper. This variety is composed of very fine veins, and sudden contrasts of blue. Another variety, in masses, is full of holes, containing decomposed calcareous spar, in the form of brown pearl spar. This variety is lightly veined with blue; the bottom, or part next the rock, is wholly blue, and transparent; but not so dark, nor so finely figured as the veins. Another variety, harder than the former, the ground clear white, but tinged like the *lichen geographicus:* this never forms veins.

"A variety, having five regular veins of fine blue: this stone is much looser in its texture; and where cut across its crystallization, it presents a beautiful honey-comb appearance: there is another variety more regularly divided into three veins. The dark blue, approaching to black, is, perhaps, of all others, the most rich and beautiful; it displays a diversity of pentagonal figures, and is bituminous. The variety which has a dark blue pervading the whole mass, is loose and friable; that of one strong blue vein is much harder, very rich, and transparent.

"Fluor in detached cubes, in the limestone, appearing a little decomposed: fluor with metallic veins: fluor decomposing: fluor of a fine green tinge; and of a blue colour, in a mass of crystallized cubes, with elastic, or indurated bitumen: fluor in compact limestone with galena, in veins and small particles, filling up interstices: fluor crystallized in cubes, upon horn-stone or petrosilex: fluor in the cavities of coralloids: fluor with barytes, commonly called tiger-stone, being opaque, and full of dirty brown spots."*

Stalactites and Stalagmites.

Stalactites and Stalagmites† are a carbonate of lime, are found pendant from the roofs, and accumulated on the floors of several caverns, and are of various sizes, hues and forms. Of these, different articles are manufactured by the petrifaction workers of Derby, Bakewell, Buxton, Castleton and Matlock bath. Philip Gell, Esq. of Hopton, has an elegant massive vase, thirty-eight inches across and fourteen inches high, carved from a stalagmite which was found on Hopton moor.

* It is manufactured (together with the beautiful black and other marbles of Derbyshire) into elegant chimney-pieces, vases, candelabras, and ornaments of great variety by very ingenious machinery, worked by steam, at J. Hall's spar-works, opposite the New Inn, Derby: where visitors meet with the greatest civility, and never fail being highly gratified, by inspecting the various operations carried on in this very interesting manufactory. Very fine specimens are always to be found, amongst other Derbyshire productions and fossils, at the Museum, and other Petrifaction shops at Matlock, Derby, Buxton and Castleton.

† See page 16.

Coralloids.

Coralloids.—The cone within cone coralloid is found in a bed ten inches deep, on the surface of the shell marble at Tupton, near Wingerworth; the cones are exceedingly distinct. Another fine specimen of the cone within cone coralloid, has been found at Blackwell; and a third, at the depth of forty-seven feet, at Aldercar, in the parish of Heanor. Coralloids, with small tubes, have been met with at Eyam, agreeing in every particular with the recent coral found in the Red Sea, named *tubularia purpurea: porpites,* and *madrepores* with round branches, have also been obtained at the same place. At Stoney Middleton, some very perfect specimens of *pori fungitæ* have been met with; and *coniæ fungitæ* have been found at Ashover; as well as very elegant screw-stones. *Millepores,* coral, branched, with the surface and extremity punctured as if with the point of a needle; and *tubipores,* a congeries of coralline tubes, paralleled or variously curved, have been procured at Middleton dale. The *cornua ammonis* is very abundant in the black marble of Ashford; *astroites,* coral, of tabular texture, with small stars on the surface, and honey-comb work withinside, is likewise procured there. At Castleton, have been found the *corallina reticulata,* or sea fan; plates of *echini,* very curiously formed, the plates pentagonal, with a small point rising in the middle; spines of echini; *belemnites,* cylindrical, but conical at one, and sometimes at both ends, about three inches long, and three quarters of an inch thick; *anomiæ,* bivalve, one valve gibbous, and often perforated at the base, the other plane; *retepores; terrebratulæ;* and *ostreopectines. Gryphites,* bivalve, oblong, somewhat resembling a boat, but narrow, and remarkably curved upwards at one end, the valve plane, has been met with in the red clay over the gypsum at Chellaston. *Rushes,* branches of *yew,* and a substance greatly resembling a *cauliflower,* have been found petrified at Matlock. A regular stratum of *muscle shells* has been discovered eleven yards deep at Swanwick; and muscle shells have also been found in ironstone, at Tupton, Chesterfield, and Cotmanhay; at the latter place they were obtained at the depth of eighty-four yards.

Animals and Insects.

Animals and Insects.—At Ashford, a small *alligator,* and various groups of *flics,* have been found in the black marble; and also the tail and back of a *crocodile,* now said to be preserved in a cabinet at Brussels. At Swanwick, a *beetle* in ironstone, and a *butterfly,* have been obtained.

Vegetable Impressions.

Vegetable Impressions.—An entire *sunflower,* with all the seeds perfectly marked, was discovered in an iron-stone over the bed of coal at Swanwick; where likewise all the following fossils were obtained: the resemblance of a *bamboo;* a flower of *chrysanthemum,* very perfect; a flower of *coltsfoot; equisetum,* or horse-tail; a plant of *maiden-hair;* several plants of *fern,* very perfect, in ironstone and bind; the cone of a *pine tree;* a branch of a *box tree;* and a small branched *moss:* the three latter in ironstone. At Holmesfield, a resemblance of the flower of a *cactus* has been found. Various other vegetable impressions have been met with in the ironstone and bind, both at Newhall and Chesterfield.

The following FOSSILS, *found in the Limestone and Ironstone of this County, are described in Martin's Petrificata Derbiensia.*

List of Fossils.

ENTOMOLITHUS.

Derbyshire Oniscite, Ashford, in marble, and Bakewell moor, in rottenstone
Lunated Monoculite, ironstone, Chesterfield.

HELMINTHOLITHUS.

Even-jointed Entrochite, in the grey marble at Monyash and other limestone
Convex-jointed Entrochite, in the grey marble at Monyash and other limestone
Warted Entrochite, rare
Ring-jointed Entrochite, in most of the limestones.

CONCHYLIOLITHUS.

(Myæ Ovalis) Ovate Myite, in argillaceous ironstone, at Tupton moor
(Cancellatus) Latticed Arcite, from limestone near Kniveton, rare
(Rostratus) Beaked Arcite, Bakewell, very rare
(Giganteus) Gigantic Anomite, in many parts of the county, particularly near Buxton
(Crassus) Thick-beaked Anomite, common in limestone
(Semireticulatus) Semireticulated Anomite common
(Punctatus) Dotted Anomite, common near Chelmorton
(Aculeatus) Prickly Anomite, limestone, at Buxton, Bakewell and Middleton
(Scabriculus) Rough-backed Anomite, Wirksworth
(Productus) Lengthened Anomite, limestone, common
(Trigonalis) Trigonal Anomite, limestone, common
(Triangularis) Triangular Anomite, limestone, not so common as the Trigonal
(Striatus) Striated Anomite, the largest Anomite
(Subconicus) Subconical Anomite, limestone, Middleton dale, rare
(Cuspidatus) Cuspidate Anomite, Castleton, very rare
(Acutus) Sharp-waved Anomite, scarce, Winster and Croomhill
(Rotundatus) Rounded Anomite, rare, Middleton and Hucklow
(Glaber) Smooth Anomite, common
(Resupinatus) Reversed Anomite, limestone, common, Middleton, Hucklow, Tideswell, &c.
(Lineatus) Streaked Anomite, common, Castleton, Hope, &c.
(Acuminatus) Acuminate Anomite, Buxton, Bakewell, Thorp, Brassington, &c.
(Pugnus) Fist-like Anomite, common at Castleton, Hope, Little Longstone, &c.
(Crumena) Purse-like Anomite, Monyash, Cromford and Winster, not very common
(Saccutus) Bag-like Anomite, Eyam, Monyash, Cronkstone, &c. common
(Nudus) Naked Pinnite, rare
(Sphæricus) Spherical Nautilite, Castleton, &c.
(Hiulcus) Wide-mouthed Nautilite, Hartington, Cronkstone, &c. not very common
(Luidii) Lhwydian Ammonite, Ashford, very rare
(Listeri) Listerian Ammonite, common
(Woodwardii) Woodwardian Ammonite, rare, Winster and Brassington
(Ingens) Great Ammonite, Ashford, in black marble
(Gesneri) Gesnerian Orthoceratite, Ashford
(Breynii) Breynian Orthoceratite, at Ashford in black marble, and at Buxton in shale
(Constrictus) Constricted Turbinite, Hucklow, Tideswell and Buxton, but not common
(Auricularis) Ear-like Helicite, Bakewell, rare
(Catillus) Dish-like Helicite, common
(Pusillus) Petit Helicite, near Chesterfield, rare.

ERISMATOLITHUS.

(Catenatus) Linked Tubiporite, Ashford, in the limestone waters
(Radiatus) Radiated Tubiporite, Winster, rare
(Duplicatus) Duplicated Madreporite, Castleton, Hope, Bakewell, &c.
(Floriformis) Flower-like Madreporite, Castleton, Middleton, &c.
(Madreporæ Cespitosæ) Cespitose Madreporite, Castleton, &c.
(Affinis) Affined Madreporite, Winster and Hucklow, rare
(Flustriformis) Flustriform Milleporite, Middleton, Buxton, &c.

Mr. Martin has given Plates of the following in his Petrificata Derbiensia.

PHYTOLITHUS.

(Striatus) Striated Filicite, ironstone near Whittington, Staveley, Tupton, &c.
(Pseudoregalis) Pseudoroyal Filicite, frequent with the foregoing
(Auriformis) Ear-shaped Filicite, Alfreton and Chesterfield, rare
(Verrucosus) Verrucose Plantite, Alfreton, Chesterfield, Padley, &c. common
(Imbricatus) Imbricated Plantite, Alfreton, Chesterfield, &c. common
(Stellatus) Stellate Plantite, Alfreton, &c.
(Acutulinux) Sharp-pointed Fossil-nut, in the gritstone quarry near Bakewell, rare
(Costaticapsulis) Ribbed Fossil-capsule, Chesterfield, very rare
(Sulcicapsulis) Internally-sulcated Fossil-capsule, Chesterfield, rare
(Sulciculmis) Sulcated Fossil-culm, common where the argillaceous gritstone occurs
(Striaticulmis) Striated Fossil-culm, frequent with the foregoing species
(Cancellicaudex) Cancellated Fossil-stem, Buxton, &c.
(Quernilignis) Oak-like silicious Woodstone, in water courses, sometimes in the veins of limestone strata near Wirksworth, Bakewell, &c. and the gravel-pits about Derby
(Corticiradix) Thick-coated Fossil-root, Chapel-en-le-Frith, Bakewell, &c.
(Compressiradix) Compressed Fossil-root, found with the foregoing.

METALLIC SUBSTANCES.

From the account which has been given of the ores and mines of Derbyshire, it will be easy to see, that the substances which come under this class, must be various and abundant.

LEAD ORES.

A greater variety of lead ores has been found in Derbyshire than perhaps in any other part of Europe in the same extent of country. The following list will give a tolerable idea of them.

Dr. Watson observes, that lead ore is not always of the same goodness in the same mine, nor even in the same part of the mine, and (what is more remarkable) the different parts of the same lump of ore have in equal bulks different weight. The weight of a cubic foot of the lightest which he had met with, was 7051 ounces, and the weight of a cubic foot of the heaviest was 7786 ounces. This difference of weight, he thinks, is most probably owing to a diversity in the size and configuration of the pores. Another observation made by Dr. Watson upon lead ore, is that it contains lead and sulphur, a liquid, and air. He says he has separated inflammable air from it by dissolving it in the acid of sea salt

The ores of lead are found in abundance, generally in the state of *galena* or *sulphurets*, which occur *massive, compact, foliated, granular, reticulated, earthy* and *crystallized* in various forms, generally the cube and octohedron modified.—A singular variety is sometimes found, called looking-glass lead ore or *slickenside*, it appears as if it had been worked to a flat face and polished, and it is said that when the miner's pick first pierces it, it explodes and flies about, bringing down great quantities of the veinstone with it, to the great danger of the workmen employed

Carbonate of lead is found in an *earthy state*, of a dull colour, and very heavy—also *crystallized* in bright small shining crystals, upon other substances, generally of a whitish colour—sometimes in acicular crystals

Muriate of lead.—This very scarce mineral was formerly found in a mine near Matlock, but very sparingly, and specimens of it are now of great value. It occurs crystallized and of a fine wine yellow colour

Phosphate of lead is very seldom met with, its colour is a bright pea green

Galena is found in many parts of Derbyshire. Its figure, texture, and colour are various

Solid massy lead ore.—Ashover

Large cubes of lead ore (*galena tessulis majoribus micans*) from Gregory mine, Ashover. Some of these measure nearly two inches

Large cubes of lead ore from the Bogrod mine near Wirksworth

Small cubes of lead ore (*galena tessulis minoribus micans*) from the same mine

Cubic lead ore, from a mine on the top of Masson hill, Matlock

Lead ore in the black marble—Ashford, and lead ore about the size of peas interspersed throughout the toadstone on Tideswell moor

Ramose lead ore, from Dimple mine near Matlock bridge. This ore shoots out into large branches, from which smaller ones proceed. It is rare and extremely beautiful

Lead ore, in large pyramids of the most lively colours, from Eyam. The beautiful tinge with which this ore is covered, is ascribed by some to a superabundant quantity of phlogiston. Others have thought that it is occasioned by the vapour of the liver of sulphur

Lead ore, in triangles, from Eyam. This also is found coloured in the same manner with the last

Steel grained lead ore, from Matlock, Yolgrave, and Eyam. Dr. Watson observes, that the mean weight of a cubic foot of 6 pieces, was 7342 ounces, and that this kind of ore is much richer than the ordinary diced ore of Derbyshire

Antimoniated lead ore—Eyam and Ashover. This kind of ore appears massy on the outside, but its fracture shows needles flat and shining like those of antimony

A large mass of lead ore, partly solid and partly antimoniated, with several veins of petroleum running through it, was found in the Gregory mine, Ashover

A large lump of lead ore, mixed with coal, found at the works at Denby

Brown sandy lead ore, in the gravel pits at Normanton near Ashbourn. It melts of itself with a gentle heat

Brown lead ore—Matlock

Potter's lead ore—Eyam

Semi-transparent white lead ore, the spatum plumbi of Cronstedt, Hubbadale mine near Bakewell

Sparry lead ore—Winster and Eyam. Mr. Longsdon of Eyam has a noble specimen of this curious and valuable kind of lead ore

Friable white lead ochre, native ceruse, from Raven-tor mine near Wirksworth. *Friable brown lead ochre*, from the same mine

Indurated calciform lead ore, of a pure white colour, from Middleton near Wirksworth. *Indurated calciform brown lead ore*, from the same place

Masses of lead have been found in the earth, detached from any vein, near Wirksworth. These pieces are of very extraordinary form. By some it is imagined, that they have been torn by great violence from their native beds. But it appears more probable, that they were produced and left by the working of some ancient mine, when it was customary to procure the lead from the ore by setting fire to the veins in which it was found.

COPPER ORES.

The copper ores of Derbyshire are not remarkable for their number or variety

Liver-coloured copper ore, of a solid texture, from a mine at the end of Lover's walk, Matlock

Very dark brown copper ore, Rushop-edge, near Chapel-en-le-Frith

Green satin copper ore, from a mine on the edge of the river Derwent, Matlock. This colour is said to be occasioned by the marine acid

Lumps of copper ore have been found in various other parts of the county, but hitherto they may be considered rather as an object of curiosity than value.

IRON ORES.

Derbyshire produces many varieties of iron ores, viz.

Pyrites or sulphuret of iron.—Its colour is yellow, of various shades, it is often enclosed in calcarious and fluor spars, in the form of minute crystals. It is found *crystallized, amorphous, radiated, stalactitic*, &c.

Magnetic iron ore or *oxide of iron.*—This variety is rare in Derbyshire, there is a bed of it in the celebrated mountain Mam Tor, near Castleton

Compact red oxide of iron.—This variety is only found in the alluvium stratum, and is often turned up with the plough

Red ironstone—Heage and Holmesfield

Light grey ironstone—Chesterfield and Wingerworth

Dark brown ironstone—Wingerworth and Chesterfield. At the latter place it has sometimes veins of pure white clay running through it

Ironstone at Chesterfield, which being exposed to the air, falls to pieces and discovers something white like spar. Mr. Bergman found, that white ore of iron contains 58 parts of calcined iron, 14 of manganese, and 38 of ærated lime

CHAP. 2. List of Fossils.

Striated iron ore, minera ferri grisea striata, is found near Bonsal. This texture seems to be produced by antimony
Stellated iron ore—Bonsal and Swanwick
Cavernous ironstone is found over most of the lead mines at Wirksworth. It is called *toft* by the miners, and lies totally neglected
The toadstone found at Matlock is exceedingly rich in iron. Much poorer matters are worked for that metal.

Earths.—Shale.

EARTHS.—The earth known by the name of *shale*, is lamellar, and does not, upon exposure to the atmosphere, until the lapse of a very long period, become plastic. The shales of Derbyshire vary in colour, from perfect black to brown, and even yellow. They produce in some places springs of ochrey water. Frequently balls and thin strata of argillaceous ironstone are found in them; with impressions of vegetables; and occasionally the anomia and muscelite shells are met with in shale. Bakestones are made from a peculiar kind of shale, which is obtained near Whitfield in Glossop. This is a limestone shale of a dark grey colour, and is so soft as to be easily cut into any shape with a knife. When dried or baked, these stones are sold at various prices, from 1*s.* to 5*s.* 6*d.* each, according to their size. Bricks are made of decomposed shale at Ashbourn, Turnditch, and other places.

Bind.

Bind appears to be a natural mixture of sand and clay, which perish and fall into a loamy earth on exposure to the air, wet, or frost. When the clay predominates, the substance is called *clunch*, and when the sand is most abundant and the degree of induration is considerable, it is called sand bind, and resembles gritstone, but will not bear exposure to the weather. Binds are of various colours and contain layers of ironstone and vegetable impressions. Some strata of hard black bind, which are met with at Alfreton, Butterley, &c. are used as black chalk by stone masons and others; and the decomposed binds and clunches in the coal measures make good brick clay. Some of the binds are calcareous, and have been found highly useful as marl.—*Clunch* is generally found beneath each seam or stratum of coal. *Clay*, properly so called, is rather rare in Derbyshire, and is found most at the edges or bassets of different strata, or in the veins of limestone rocks.

China Clay.

China clay, of a most beautiful white colour, is procured in small quantities, in Bald-mare, Green-linnet, Suckstone, and Upper-field mines, in the 4th lime, in Brassington, in Clay-pit-dale mine in Hartington, &c.; in a fissure in the 4th lime, near Newhaven house, and perhaps in other places on this same stratum. At Pinxton, and in St. Alkmund, Derby, there are *china factories*.

Pipe Clay.

Pipe clay, a white and pure clay, inferior to china earth, and is procured in Bolsover, from beneath the yellow lime, from Gander-lane in Killamarsh, in Hartshorn, near Newhaven-house, and in the 4th limestone: some lumps of it also occur in the alluvial clay on Chellaston hill. In Allsaints and in St. Werburgh's, Derby, in Bolsover, and at New Brampton near Chesterfield, there are manufactories of *tobacco pipes*.

Potters' Clay.

Potters' clay, whitish, yellow, and red of various hues, are found in the coal measures of Derbyshire and near it, and are applied to the making of pottery, earthen and stone wares of various kinds: clay-pits of this description may be found at

Belper-gutter, in Belper, in 2nd coal shale
Cadhouse-Lane in Ticknall, in coal measures
Chesterfield W, in 9th coal shale
Church-Gresley Common, in coal measures

List of Potters' Clay Pits.

Crich NE, in 2nd and 3rd coal shale
Hartshorn, 1 m. NE; and SW at Wooden Box, in coal measures
Heage, Nether-end, 3rd in coal shale
Horsley, in coal shale
Morley-moor, in coal shale
Newbold W and N, in Chesterfield, in 9th and 10th coal shales
New Brampton, near Chesterfield, in 9th coal shale
Pinxton, in coal shale
Smalley Common, in coal shale
Smithy-houses in Denby, in coal shale
Stanage in Ashover, in 2nd coal shale
Stubbing, near Wingerworth, in 2nd coal shale
Ticknall S, in coal shale
Wessington in Crich, in 3rd coal shale
Wheatcroft in Crich, in 2nd coal shale; and SE (Moorwood) in 3rd coal shale
White-moor, near Belper, in 2nd coal shale.

The *Potteries*, or manufactories of earthen or stone ware, where these clays are used, are situate at

List of Potteries.

Alfreton town, red ware
Belper-gutter, near Belper, 2 for stone ware, bottles, pitchers, &c.
Chesterfield, white earthen, and brown and red ware, large water-pipes for gateways, drains, &c.
Church Gresley, 4 for white, yellow, and red ware
Hartshorn W, at Midway-houses; and SW at Wooden Box
Denby, stone bottles
Ilkeston E, by the Erewash canal
Newbold (near Chesterfield) N NE and NE, on the race-common
New or Little Brampton, near Chesterfield
Smalley common, water-pipes, and cylinders for arched fire-proof ceilings
Swadlingcote, in Church Gresley, white and yellow
Ticknall, 2 for red ware
Whittington, red.

Chimney Pots.

Chimney pots, garden pots, and various other useful and common articles of coarse pottery, are made at several of the above potteries, and *pancheons,* or shallow red glazed pans for setting of milk in dairies, in great numbers.

Fire Clay.

Fire clay.—The infusible nature of the clays which are found under the coal seams in this district, is particularly observable in the coal shales, or those clays lying amongst the grit rocks, which are in high repute, not only for making bricks to line iron furnaces, and others where the most intense and long continued heats are required, but also when tempered like mortar, to be used in setting fire-bricks and stones, in the linings of furnaces, making coarse crucibles, and saggers for the china factories, &c. At the following places are *pits of fire clay,* viz.

List of Fire Clay Pits.

Belper-gutter, near Belper
Birkin-lane in Ashover
Church Gresley common
Dore in Dronfield
Gander-lane in Killamarsh
Heage, Nether-end
Holmsfield, in Dronfield
Measham
Newhaven
Openwood-gate, in Horsley
Shuttlewood-common, in Bolsover
Stanage, in Ashover
Swadlingcote, in Church Gresley
Totley, in Dronfield
Wheatcroft, in Crich
Wooden-box, in Hartshorn.

Fire-Bricks.

At Birkin-lane, Shuttlewood-common, Crooks-moor, and Swadlingcote, *fire-bricks* are manufactured for sale, and are in great repute: such are also made at Dore, Gander-lane, Holmsfield, Midhope-stones, Pennyford, and Totley. At Swadlingcote, arch-bricks, proper for the tops of reverbatory furnaces, are made, vulgarly called velvetory bricks: here also are made round tiles, for the use of the bar-iron makers.

Tile and Brick Clay.

Tile and Brick clay.—The brick kilns upon the regular clays of the coal series, are at Belper-gutter; Birkin-lane, Ashover; Church Gresley common; Clifton, Ashbourn; Gander-lane in Killamarsh; Hartshorn; Measham; Melbourne; Swadlingcote and Ticknall, &c.—The alluvial clays are in many places capable of being converted into bricks; this is done at Bolsover; Newhaven; Roston; Turnditch, &c.—In other situations, bricks and tiles are made from the more tenacious beds of red marl: the principal kilns of this kind are at Appleby, Derby, Longford, Mickleover, Newton Solney, &c.—The draining of land has given occasion to the

CHAP. 2. making of draining tiles and pipe-bricks, which are to be had at the last mentioned kilns.—In the limestone districts, clay is of important use for

Water Clay. lining the bottoms of artificial ponds: this is called *water-clay*, and is procured from the decomposed bassets of the toadstone in various places. Clay was formerly burnt in several parts of the county for the purpose of repairing roads, but the practice is generally discontinued.

Marl. *Marl.*—The important strata of red marl occupies the southern parts of the county, as has already been noticed. Large marl-pits are observable at Allestree, Donkil-pits in Catton, Doveridge, Ingleby, Persal-pits in Croxall, Radbourn, Rodsley, Waldley near Marston, Montgomery, Wild park near Mugginton, &c. &c. The alluvial marl of Cheshire extends into the north-western part of this county, and there are large ancient marl-pits in the neighbourhood of Glossop. On the south-east of Tibshelf there are also large ancient marl pits. The softer parts of the tufa at Matlock and some other places, are frequently called marl, and according to tradition, were formerly used as such, but the practice is laid aside.

Tufa. *Tufa, tophus, puff stone or marl stone,* is a porous soft stone of modern formation, which the springs of water, issuing from the calcareous rocks have deposited in some valleys, enveloping the horns, bones and teeth of animals, the leaves and stems of trees and plants, &c. The largest accumulation of this kind is at Alport near Yolgrave. At Matlock bath the mass of tufa is very considerable, and is yet accumulating by the side of the Derwent.—Tufa has been in some cases used as a freestone, and there is a species of tufa in Tideswell dale, of which chimney pots are made; which are durable and not inelegant. Masses of tufa are found at Alport, Bolsover, Brassington, Cressbrook dale, Griffe, Matlock bath, Millers dale, Monks dale, Monsal dale, Slaley in Bonsal dale, Tideswell and Wormhill.

Gypsum. *Gypsum, alabaster or plaster stone.*—This is a crystallized sulphate of lime, and is produced extensively in the red marl strata. It forms thin beds or strata in particular spots, sometimes finely striated transversely to the strata, but not unfrequently it is found in vast nodules, or irregular and confused crystals, forming hills, where the covering of marl appears to be stripped off. Part of Chellaston hill, in particular, would present a naked and water-worn rock of gypsum, were it not for the alluvial matter which is spread over it. This alluvial matter consists of a bluish earth intermixed with large bolders, and where this most abounds, the purest and best white plaster is obtained. The striated gypsum is mostly under red marl. There are four gypsum pits on the south-eastern side of Chellaston, which are in the possession of Mr. Henry Orton and Mr. George Wooton. Until the year 1820, the gypsum was got by open-work, but since that period, mining, which was first attempted by Mr. Orton, has been successfully carried on. The principal demand for the pure white gypsum, or that slightly streaked with red, is by the potters of Staffordshire. It is used for various purposes, and sells at 10*s.* per long ton.* In working the mines or pits, some particularly fine blocks are selected, and are sold at 30*s.* per ton† to the turners and makers of alabaster ornaments. The in-

* 120 lb. to the Cwt.

† This is called Petrifaction stone: the white for calcining is 14*s.* per ton.

ferior sort, which is streaked and mixed with blue and green earth, is called flooring stone, and sold at from 5*s*. to 7*s*. and 10*s*. per ton for making plaster floors. A quantity of very white, striated or fibrous gypsum, is dug in the Chellaston pits, in thin beds, called joists; this used to be sold for the commonest purposes at a very low rate, but it has recently been discovered to possess some of the qualities of the finest white stone.—The pure white alabaster, sometimes beautifully mottled and veined, is worked into innumerable articles of ornament. It is employed in sculpture and architecture, and fine specimens of vases, columns, &c. may be seen at Hall's Spar works, Derby. The superb columns in the splendid mansion of Lord Scarsdale, at Kedleston, are formed of this material.—Immense quantities of the inferior kinds are calcined to form plaster of Paris.—*Fibrous or silky Gypsum* has sparkling lustre: it is worked into beads for necklaces, ear-drops, &c. It has a curious cat's-eye appearance, and is commonly called *Satin stone*. The best kind is procured in the neighbourhood of Sawley.—*Granular Gypsum* is found in the same places as the alabaster.—*Anhydrite* is rarely found, but occasionally it is met with among the other varieties of gypsum: its colour is a very pale blue, and it is much harder and heavier than the common gypsum.—*Selenite* often occurs in crystals imbedded in the fibrous gypsum, and in detached crystals, transparent and foliated.

Gypsum.

Heavy earth (terra ponderosa) *or cauk*—also called *barytes*, *crystallized sulphate of barytes*, *tush* and *marmor metallicum*, is found in the lead mines throughout the county, particularly at Ashford, Bonsal, Bradwell, Brassington, Calke, Carsington, Castleton, Crich, at Cromford there is a peculiar cauk vein; Eyam, Middleton, Monyash, Overton, Sheldon, Stoney Middleton and Wirksworth.—In a stone-pit on the south side of Birchwood moor, near Roston, there are strong veins of rose-coloured barytes. Some specimens of a white and red colour have been analyzed, and it was discovered that barytes crystallizes in very confused rhomboidal laminæ. The specific gravity of cauk is 4·33.—The cauks of Derbyshire have long been supposed by the miners to be of a metallic nature, and they are now converted into a material which is used for many of the purposes to which white lead was formerly applied.—The works established for this process* are at Via Gellia, and in the town of Derby. The price, at the mines, of cauk in its raw state, is from 8*s*. to 12*s*. per ton.

Heavy Earth.

Sand.—There does not appear to be any regular stratum of sand in this county, except that below the lias clay. The white sand in the red marl at Normanton, near Derby, is most probably an accidental bed, and not a continued *stratum*, as Dr. Darwin supposed, underlaying the Derwent. In some situations the gritstones are found decomposed, and the particles of sand loosened on the surface, as at Dethick near Matlock, and at White-Knowl in Chapel-en-le-Frith. In several places on the eastern side of Derbyshire there are found patches of red loamy alluvial sand, in very regular layers, which is excellent as *founder's sand* or *casting sand*; in others, a sharp sand, fit for the cleaning of utensils, called *scouring sand*,

Sand.

* This process seems to depend upon the precipitation of the *barium* metal, from an acid by means of the prussiate of potash.

CHAP. 2. is dug, and in many situations the sandy gravel is used, after separating the stones by a sieve, for making mortar, and other purposes.

Fuller's Earth. *Fuller's earth.*—This earth occurs in lumps of considerable size in the quartz gravel pit, east of Bretby church, in the hard gravel rock under Measham, and in the alluvial covering of the gypsum quarries at Chellaston.

Bitumen, &c. *Bitumen, mineral tallow, rock oil.*—Rock oil or petroleum* is found in veins of the black marble at Ashford: it gently exudes when the sun shines upon the stone. Hardened rock oil (pixmontana or asphaltum) is found in Odin mine, Castleton, and bitumen of an exceedingly elastic nature is also found at Castleton. The quantity of rock oil was so great in the driving of Stoke sough, near Stoney Middleton, that it swam on the surface of the water, and would take fire from a torch or candle. The mineral tallow is a light yellow, flexible substance, and has been found in the toadstone rock near Hopton hall. In the same rock are small veins filled in part with indurated bitumen.

Sulphur. *Sulphur* has been found in layers, and in very great purity, at Haslebage near Bradwell, at Tideswell moor, and in the Odin mine. Generally it is combined with lead and other metals, and with the shales of the northern district.

Peat. *Peat.*—This substance, according to Mr. Kirwan, yields from distillation, water, acid, oil, and volatile alkali, and its ashes contain a small proportion of fixed alkali. These are either white or red, according to the quantity of ochre or pyrites which they contain.

Peat is found throughout the north-west extremity of the Peak, and in most parts of the east moor. When first dug up, its texture is soft, smooth and oily, but being cut into oblong pieces resembling bricks, and exposed to the influence of the sun and air during the summer season, it becomes brittle and inflammable, and is in many places used for fuel.

Turf. *Turf.*—This substance generally covers the peat, though in some situations it is found alone. It consists of a yellowish or brownish bituminous earth, interwoven with the roots of moss, heath and other plants.

Both the above substances are possessed of a remarkably antiseptic quality. Animal bodies may be preserved in them for almost any length of time, though when taken out and exposed to the air, they soon perish.

* "Petroleum is found in this stratum (4th limestone) in various stages of fluidity, in the mineral veins, and at Castleton in a water-course on the surface; the most rare is in an elastic state resembling the Caoutchouc or India rubber, which is found mixed with minerals in the veins, and within petrified shells. Asphaltum is found of various sorts; the most rare is of a fine hair-brown colour, very brittle, of conchoidal fracture with strong lustre; found imbedded in a species of the elastic sort. It is probable that this is the substance which gave the fine brown shades in the much admired paintings of the celebrated Titian." *White Watson's Delineation*, page 59.

CHAPTER III.

Natural productions of Derbyshire. Observations. Plants: beasts: birds: fishes: reptiles and insects.

Natural Productions.

THE distinguishing natural feature of this county is to be sought in its geographical and geological aspect; the diversities of which have been the subject of the preceding chapters. In its vegetative, animated and intellectual characteristics, there cannot be expected to exist many very decided peculiarities; and consequently, in speaking of plants, beasts, birds, fishes, reptiles and insects of Derbyshire, our observations must be liable to be regarded either as too general or too confined. There are undoubtedly varieties in both the botanical and zoological productions of every district, and many of these varieties, as they exist in this county, have been traced and pointed out by intelligent inquirers. Some beautiful flowers are found in abundance among the rugged grit and limestone rocks of the Peak, which seldom are met with in equal perfection elsewhere; around the dreary hills that encompass Middleton, violets are in greater profusion than the common daisy, and there is a species of the Orchis which is said to be known only to our northern valleys. Among the reptiles and birds, some peculiarities, not, however, sufficiently marked, have been noticed; but considerable doubt attaches to such notices, and the natural history of the county is still open to very considerable research.

Observations.

With respect to the elegant and interesting pursuits of the botanist, there can scarcely be a field of richer diversity than Derbyshire, where, as we have already seen, the aspect of the county is varied with rocky eminences and deep valleys, with plains, and with the gentle undulations of the red marl hills and cavities in the southern district. The soil varies also, and the climate of the High Peak differs from that of the Low Peak, which differs still more from that which is experienced on the banks of the Trent. Hence the flora of Derbyshire must embrace a variety of species, while the individual plants will also be found to vary in colour, in size and in beauty.

"In botany," says an amiable writer, "all is elegance and delight. Its pleasures spring up under our feet, and as we pursue them, reward us with health and serene satisfaction. None but the most foolish or depraved could derive any thing from it, but what is beautiful, or pollute its lovely scenery with unamiable or unhallowed images.

"Whether we walk forth in the early spring, when the ruby tips of the hawthorn-bush give the first sign of its approaching vegetation; or a little later, when the violet welcomes us with its scent, and the primrose with its beauty; whether we contemplate, in succession, all the profuse flowery treasures of the summer, or the more hidden secrets of nature, at the season when fruits and seeds are forming—the most familiar objects, like old friends, will always afford us something to study and to admire, while new discoveries will awake a train of new ideas. The yellow blossoms of the morning, that fold up their delicate leaves as the day advances; others that

CHAP. 3. court and sustain the full blaze of noon; and the pale night scented tribe, which diffuse their sweet fragrance towards evening, will all please in their turn. The more we study the works of the Creator, the more their wisdom, beauty and harmony become manifest, even to our limited apprehensions; and while we admire, it is impossible not to *adore*.

"Soft roll your incense, herbs, and fruits, and flowers,
In mingled clouds to HIM, whose sun exalts,
Whose breath perfumes you, and whose pencil paints!"

In giving the following extensive catalogue of plants and flowers, we beg to acknowledge ourselves debtors, and return our thanks to Mrs. Lucy Hardcastle of Derby, and Mrs. Margaret Stoven of Newbold near Chesterfield; the former lady so highly talented in discovering and delineating the beautiful characteristics of the floreal region, the latter so eminent for her complete and scientific botanic collections.

The following lines, hitherto in manuscript in the album of a young lady of Derby, will not be considered inappropriate as an introduction to a list of plants and flowers.

"Bring, bring me flowers,—bring flowers of every shade:—
Blue hyacinths that emulate the sky,
And gold crysanthemums that never fade,
And amaranths, that tho' they bleeding lie,
Retain unstained their brightness as they die,
And silvery lilies, proud because they're pure,
And the arm'd rose, that rudeness doth defy,
And rich anémones, that still immure
Their beauties from the breeze, till of its fervour sure.

"Bring, bring me flowers, fair Fancy, bring me flowers,
Emblems of those these *album-leaves* may grace!
Let there be none that the dark blight devours,
Let there be none that cankerous spots deface—
None—none, that with their odours foul debase
The wreathe they're wove in: let there not be one,
That like the proud blue bind-weed, would embrace
The loftiest, loveliest stems, and leave undone
Even the lily pure, that it hath over-run.

"O let not one, with fraudful beauty, bear,
Like aconite, its venom in its scent;
Let all be honest, though not all be fair:
And let the humble with the rich be blent!
I would not miss the hare-bell there, though bent
With morning dew like tears;—the violet
So widely sweet, though with its shade content:
And who the meadow daisy would forget,
That glistens o'er green fields, like pearls in emerald set?"

* N *.

A SKETCH OF THE BOTANY OF DERBYSHIRE.

TABLE OF THE CLASSES.

Classes.		*Familiar Examples.*
1 MONANDRIA	One stamen	Mare's tail, Wa. Starwort
2 DIANDRIA	Two stamens	Speedwell, Brooklime
3 TRIANDRIA	Three stamens	Grasses, Crocuses
4 TETRANDRIA	Four stamens (all of the same length)	Teasel, Plantain
5 PENTANDRIA	Five stamens	Honeysuckle, Primrose
6 HEXANDRIA	Six stamens (all of the same length)	Harebell, Snowdrop
7 HEPTANDRIA	Seven stamens	Wintergreen
8 OCTANDRIA	Eight stamens	Mezereon, Willowherb
9 ENNEANDRIA	Nine stamens	Flowering Rush
10 DECANDRIA	Ten stamens	Pink, Stitchwort
11 DODECANDRIA	Twelve stamens, or more (fixed to the receptacle)	Houseleek
12 ICOSANDRIA	Twenty stamens (fixed upon the calyx)	Strawberry, Thorn
13 POLYANDRIA	Many stamens (fixed to the receptacle)	Poppy, Buttercups
14 DYDYNAMIA	Four stamens, two of them longer. One pistil. Flowers ringent	Foxglove, Deadnettle
15 TETRADYNAMIA	Six stamens, four of them longer. One pistil. Flowers cruciform	Stock Gilliflower, Wall-flower
16 MONADELPHIA	Threads united at bottom, but separate at top	Mallow, Cranesbill
17 DIADELPHIA	Threads in two sets. Flowers butterfly-shaped	Pea, Clover
18 POLYADELPHIA	Threads in three or more sets	St. John's Wort
19 SYNGANESIA	Anthers united. Five stamens. One pistil. Flowers compound	Dandelion, Daisy, Thistle
20 GYNANDRIA	Stamens upon the pistil	Orchis
21 MONOECIA	Stamens and pistils in separate flowers, upon the same plant	Bryony, Hazel
22 DIOECIA	Stamens and pistils distinct, on different plants	Hop, Willow
23 POLYGAMIA	Stamens only, others pistils only, others both	Orach
24 CRYPTOGAMIA	Flowers inconspicuous	Ferns, Mosses, Flags.

LATIN NAME, ENGLISH NAME, WHERE FOUND, WHEN IN FLOWER, COLOUR OF THE FLOWER.

REFERENCE, A *annual*, P *perennial*, B *biennial*, S *septennial*, &c.

CLASS 1. MONANDRIA.—MONOGYNIA.

Chara vulgaris, *common chara, stonewort*, pools, July, a petal
hispida, *prickly chara*, pools, July to August, a petal
flexilis, *smooth chara*, pools, July to August, a petal
Aphanes arvensis, *parsley piert*, cultivated land
Hippuris vulgaris, *mare's tail*, ditches, May, a petal

DIGYNIA.

Callitriche aquatica, *stargrass or starwort*, ditches, April to October, white
verna, *water chickweed*, ditches, March to October.

CLASS 2. DIANDRIA.—MONOGYNIA.

Ligustrum vulgare, *privet*, hedges, May to June, white
Flaxinus excelsior, *ash*, woods, April to May, a petal, abundant on limestone rocks
Veronica arvensis, *wall speedwell*, old walls, May, blue, Derby
officinalis, *male speedwell, or fluellen*, barren ground, May to June, blue, Matlock
alpina, *alpine speedwell*, high situations, July to August, blue, on Masson mountain, Matlock
serpyllifolia, *smooth speedwell, or Paul's betony*, meadows and pastures, May to June, blue, P. Derby and Pinxton
Beccabunga, *brooklime speedwell*, rivers, July, blue, P. wet ditches and small running streams, Chester green
Anagallis, *water speedwell*, marshes, July, blue, P. Kedleston, South Normanton, common in wet ditches
scutellata, *narrow leaved speedwell*, marshes, July to August, flesh coloured, P. near Derby, in ditches on the Ashbourn road and Allestree
montana, *mountain speedwell, madwort, or stalked speedwell*, woods, April to June, blue, Nutwood, Darley, near Derby

Veronica Chemædrys, *wild germander speedwell*, meadows and pastures, May, blue, com.
agestris, *procumbent germander speedwell, or chickweed*, cultivated land and rubbish, April to October, blue, A. Derby
hederifolia, *ivy leaved speedwell, or henbit*, corn fields and rubbish, April to Oct. blue, A. in the plantations at Markeaton, near Derby
Pinguicula vulgaris, *butterwort*, bogs, May to June, violet, P. Mackworth
Utricularia vulgaris, *hooded water milfoil*, stagnant water, July, yellow
Lycopsis europæus, *water horenound*, river banks, July to August, white, P. Derby, Pinxton, South Normanton, &c.
Salvia pratensis, *meadow clary*, dry pastures, July, violet, P. Crich, near Hallowes
verbenaca, *wild clary*, dry pastures, June to October, violet, found often in church yards. Ray says this plant was made use of as an instance of Popish superstition, on account, perhaps, of its use in medicine
Circæa Lutetiana, *enchanter's night shade*, shady places, June to July, reddish, Matlock bath, Quarndon well, Newton wood, Sutton spring, &c.
alpina, *alpine night shade*, mountains, July to August, reddish, Matlock, Lover's walk
Verbena officinalis, *vervain*, roadsides, July, purple.

DIGYNIA.

Anthoxanthum odoratum, *sweet scented vernal grass*, meadows and pastures, May, about Derby, common.

CLASS 3. TRIANDRIA.—MONOGYNIA.

Valeriana dioica, *small or marsh valerian*, moist meadows, June to July, flesh coloured, in a meadow at Thornhill farm, near Derby
officinalis, *great wild valerian*, moist meadows, June to July, flesh coloured, on the banks of the Derwent, near Derby
locusta, *common salad lettuce valerian*, corn fields, April to May, blue, in a corn field near Quarndon
fœdia olitoria, *strong scented garden valerian*
dentata, *oval fruited valerian*, June to July, purple
Crocus vernus, *spring crocus*, meadows, March, yellow, in the Holmes and Old Meadows, near Derby
nudiflorus, *naked flowering crocus*, meadows, October, violet, in the Holmes and Siddals, near Derby
Iris Pseudacorus, *yellow flag, flower de luce or water flag*, moist places, July, yellow, on the banks of the Derwent near the old silk mill, Derby
fœtidissima, *stinking gladdon*, shady places, June to July, lead colour
Nardus stricta, *small mat grass*, heaths, July, common
Schænus Mariscus, *prickly bog rush*, bogs, July to August
nigricans, *black-headed bog rush*, bogs, June
Cyperus longus, *sweet cyprus or English galingale*, ditches, July
Scirpus palustris, *club rush*, marshes, June to July
cæspitosus, *dwarf rush*, heaths, July, near a sheet of water in Allestree park
fluitans, *floating club rush*, heaths, July to August, shallow waters
lacustris, *bull rush*, rivers, July, common about Derby
setaceus, *least club rush*, wet ground, July to August
triqueter, *triangular club rush*, marshes, August, wet pastures near Derby
sylvaticus, *millet cyprus grass*, July, moist shady places
Eriophorum angustifolium, *many-headed cotton grass*, meadows, March, Dovedale, meadows near Wirksworth
vaginatum, *hare's tail rush, moss crops, or single headed cotton grass*, April, Eastmoor, Dovedale
polystachion, *moss crops or cotton grass*, April, Dovedale.

DIGYNIA.

Phalaris arenaria, *sand canary grass*, meadows and pastures, June
arundinacea, *reed canary grass*, lanes, July, banks of rivers and moist places, common
Phleum bocheneri, *purple stalked cat's tail grass*, meadows and pastures, August
pratense, *common cat's tail grass*, meadows and pastures, June to October, stem grows to the height of six feet
nodosum, *bulbous jointed cat's tail grass*, meadows and pastures, June to October
Alopecurus pratensis, *meadow fox tail grass*, meadows and pastures, May
agrestis, *slender fox tail grass*, in wet arable land, July
geniculatus, *jointed fox tail grass*, wet meadows, July, in shallow waters frequent

Milium effusum, *millet grass*, moist shady places, June to July, mountains, common
paradoxum, *black seeded mellet grass*
Agrostis palustris, *marsh bent-grass*, arable land
canina, *awnless brown bent grass*, wet pastures and peat bogs, July
vinealis, *short bearded bent*, moist pastures
vulgaris, *common bent*, dry pastures, on road sides
alba, *marsh bent, or white couch*, marshes, the root will perforate a potatoe
panacea, *bearded bent grass*, September
nigra, *black couch grass*, in cold clayey arable land
stolomifera, *creeping bent grass*, moist meadows, July to August
Aira cristata, *crested hair grass*, dry pastures, July to August
aquatica, *water hair grass*, shallow waters, May to June
cæspitosa, *turfy hair grass*, moist places, June to July
flexuosa, *waved mountain grass*, heaths, July
præcox, *early hair grass*, dry commons, May to June
caryophyllea, *silver hair grass*, sandy pastures, May to June
Holcus lanatus, *woolly soft grass*, meadows and pastures, June to July
mollis, *creeping soft grass*, corn fields and hedges, July to August
avenaceus, *tall oat-like soft grass*, meadows and pastures
odoratus repens, *sweet scented soft grass*, June
Melica uniflora, *wood melic grass*, groves, May to June
cœrulea, *purple melic soft grass*, mountains, August
nutans, *mountain melic grass*, mountains, June to July
ciliata, *ciliated melic grass*, meadows and pastures, July
Glyceria aquatica, *water glyceria*
fluitans, *floating glyceria*
Poa aquatica, *reed meadow grass*, ditches, sides of rivers and canals, grows six feet high, July
distans, *reflexed meadow grass*, sandy meadows, July
procumbens, *procumbent sea meadow grass*, July to August
rigida, *rigid meadow grass*, lime rocks, June
compressa, *flat stalked meadow grass*, walls, July to August
alpina, *alpine meadow grass*, mountains, July
annua, *annual meadow grass*, March to November, foot paths and gravel walks
nemoralis, *wood meadow grass*, woods, June
cæsia, *sea-green meadow grass*, mountains, June to July
fertilis, *fertile meadow grass*, meadows, June
trivialis, *rough stalked meadow grass*, meadows and pastures, June
nervata, *nerved meadow grass*, meadows and pastures, June
subcœrulea, *blue meadow grass*, meadows and pastures, June
pratensis, *smooth stalked meadow grass*, meadows and pastures, June
Briza minor, *small quaking grass*, corn fields, July
media, *quaking grass*, meadows and pastures, June to July
Dactylis glomerata, *round headed cock's foot grass*, meadows, June to August
glaucescens, *glaucous cock's foot grass*, meadows, June to August
variegatæ, *striped cock's foot grass*, meadows, June to August
Cynosurus cristatus, *crested dog's tail grass*, pastures, July
Festuca ovina, *sheep's fescue grass*, heaths and high pastures, June
ovina tenuis, *slender sheep's fescue grass*, dry pastures, June
vivipara, *viviparous fescue grass*, limestone hills, July
duriuscula, *hard fescue grass*, meadows and pastures, July
rubra, *creeping fescue grass*, meadows and pastures
bromoides, *bromelike fescue grass*, dry pastures, June
myurus, *capon's tail fescue grass*, walls and dry pastures, June
dumetorum, *wood fescue grass*, woods, hedges and thickets, July
gigantea, *giant fescue grass*, meadows and pastures, July
loliacea, *rye grass like fescue grass*, moist pastures, June to July
pratensis, *meadow fescue grass*, meadows and pastures, June to July
elatior fertilis, *tall fertile fescue grass*, moist meadows, June to July
pinnata, *pinnated fescue*, moist meadows, June to July
Bromus secalinus, *smooth rye brome grass*, corn fields, July, culm three feet high, the seed is called long tail by farmers when in their corn samples
multiflorus, *many flowering brome grass*, corn fields, July
mollis, *soft annual brome grass*, walls and meadows, June
racemosus, *smooth brome grass*, meadows and pastures, June
asper, *hairy stalked brome grass*, moist shady places, July
sterilis, *barren brome grass*, rubbish, June to July
arvensis, *meadow brome grass*, corn fields and meadows, July
giganteus, *tall brome grass*, moist hedges and meadows, July

Bromus erectus, *upright brome grass*, meadows and pastures, July
diandrus, *wall brome grass*, sandy ground, June
maximus, *large panicled brome grass*, meadows and pastures, July
uniolaides, *flat spiked brome grass*, meadows and pastures, July
Avena fatua, *wild oat grass*, August, a weed in corn fields
pratensis, *narrow leaved oat grass*, meadows and pastures, July
flavescens, *golden oat grass*, meadows and pastures, June to July
planiculmis, *broad leaved oat grass*, meadows and pastures, June
parviflora, *small flowered oat grass*, meadows and pastures, June
pubescens, *yellow oat grass*, meadows and pastures, June
fragilis, *slender oat grass*, meadows and pastures, June
Arundo phragmites, *common reed*, shady places, rivers and ponds, July
epigeios, *wood reed*, moist woods, July
calamagrostis, *fine panicled reed*, moist woods, July
arenaria, *sea reed grass*, meadows and pastures, August
Lolium perenne, *perennial darnel*, meadows and pastures, June
temulentum, *bearded darnel*, corn fields, July, a very pernicious weed amongst wheat
arvense, *white darnel*, corn fields, July
Hordeum murinum, *way-bennet or wall barley*, walls and rubbish, June to August, against old walls and sides of bridges
pratense, *meadow barley*, moist pastures, June
bulbosum, *bulbous barley grass*, meadows and pastures, July
Elymus europæus, *wood lyme grass*, woods, June
Triticum repens, *creeping wheat grass*, rubbish, June, August
caninum, *bearded wheat grass*, shady places, July
junceum, *rush leaved wheat grass*, meadows and pastures, August to September
compositum, *compound spiked wheat grass*, meadows and pastures, August to September
rigidum, *stiff wheat grass*, meadows and pastures, September to October.

TRIGYNIA.

Montia fontana, *water chickweed*, shallow waters, March.

CLASS 4. TETRANDRIA.—MONOGYNIA.

Dipsacus fullonum, *manweed or fuller's teasel*, hedges, July, purple, B. in a lane leading to Radbourn, frequent near Derby
sylvestris, *wild teasel*, moist places, July, purple, road side near Kedleston, Spondon, Thurvaston, &c.
pilosus, *small teasel*, moist places, August, white, Markeaton plantation, hedges near Derby, Spondon, &c.
Scabiosa succisa, *devil's bit scabious*, pastures, July to October, violet, P. near Little Chester, in a pasture opposite Darley, a corn weed
arvensis, *field scabious*, June to August, purple, P. in corn fields near Breadsal
columbaria, *fine leaved scabious*, dry pastures, June to August, purple, P. heights of Dovedale, and Horsley castle
Sherardia arvensis, *little field madder*, corn fields, May to August, blue, A. in a high field on Quarndon common
Asperula odorata, *sweet woodruff*, woods, May, white, P. Mackworth, Sutton, Dovedale, Markeaton, Matlock, &c.
cynanchia, *small woodruff*, chalk hills, July, P. Normanton, Pinxton
Galium cruciatum, *crosswort bed straw*, bushy places, May to August, yellow, in Thornhill farm, near Derby
palustre, *white ladies' bed straw*, moist meadows, July, white, P. Coxbench, near Bowbridge common
saxatile, *smooth heath bed straw*, heaths, July to August, white
uliginosum, *rough marsh goose grass*, moist pastures, August, white, P. Coxbench, Pleasley park, &c.
erectum, *upright goose grass*, moist pastures, June to July, white, in a wood near Wheathill
pusillum, *least mount. goose grass*, mountains, May to August, white, P. Matlock bath, Middleton dale, very plentiful
verum, *yellow ladies' bed straw*, bushy places, July to August, yellow, P. in dry pastures near Duffield
Mollugo, *great hedge goose grass*, hedges, July to August, white, Pinxton, frequent
aparine, *goose grass or hairiff*, hedges, May to August, white, A. hedges and gardens, very common
montanum, *mountain goose grass*, high pastures, July, P. Middleton dale
procumbens, *trailing or creeping goose grass*, heaths, on Quarndon common

Plantago major, *broad plantain*, meadows and pastures, June to August, road sides, common
media, *hoary plantain*, meadows and pastures, May to August, on gravelly soil on the side of roads
lanceolata, *rib-grass or plantain*, meadows and pastures, June to August, P. frequent
Coronopus, *star of the earth, or buck's horn plantain*, June to August, A. on a sandy bank at Swarkstone
Sanguisorba officinalis, *great burnet*, meadows and pastures, June, P. Breadsal meadow
Cornus sanquinea, *wild cornel or dog berry tree*, woods, June, white, Derby, Kedleston, Glapwell, &c. common
Parietaria officinalis, *common pellitory of the wall*, walls, May to August, green, on an old wall near the Holmes, Derby
Alchemilla vulgaris, *ladies' mantle*, meadows and pastures, June to July, green
arvensis, *field ladies' mantle*, corn fields, May to August, green.

DIGYNIA.

Cuscuta europæa, *greater dodder, hell weed or devil's guts*, on thistles, July to September, a parasitical plant on flax and heath
Epithymum, *lesser dodder*, on shrubs, August, on heath and thyme.

TETRAGYNIA.

Ilex aquifolium, *holly tree*, hedges, May, white
Potamogeton natans, *broad-leaved pond weed*, rivers and ponds, July, green
perfoliatum, *perfoliated pond weed*, rivers and ponds, July to August, purple
densum, *close-leaved pond weed*, rivers and ponds, June, green
lucens, *shining-leaved pond weed*, rivulets, June to July, green
crispum, *curled pond weed or the greater water caltrops*, May to June, reddish, in ditches, stagnated waters, and rivers, stem six feet long
compressum, *flat-stalked pond weed*, rivulets, June to July, green
pectinatum, *fennel-leaved pond weed*, rivulets, July, olive, in large ponds and rivers
lanceolatum, *lanceolate pond weed*, rivulets, June to July, greenish
Sagina procumbens, *trailing pearl wort, chickweed, or break stones*, rubbish, May to Aug. white, dry walls and gravel walks
apetala, *annual pearl wort*, rubbish, May to June, white, walls, gravel walks, and other dry situations
Mœnchia erecta, *least stitchwort*, gravelly soils, April to May.

CLASS 5. PENTANDRIA.—MONOGYNIA.

Myosotis scorpioides palustris, *water mouse ear or scorpion grass*, May to August, blue, in the Wilderness, Priory near Breadsall
arvensis, *field scorpion grass*, corn fields, May to August, blue, on the high grounds about Derby, frequent
versicolor, *small flowered field scorpion*, April to June
Lethospermum officinale, *corn gromwell*, on the side of the road between Matlock bath and Matlock, June, P.
arvense, *corn gromwell or bastard alkanet*, corn fields, May to June, A. Breadsall and Allestree
Cynoglossum officinale, *hound's tongue*, rubbish, June, purple and red, P. Ashover and Matlock
Symphytural officinale, *common comfrey*, wet places, May to June, white, hedges and banks of rivers, common
Borago, officinalis, *common borage*, rubbish, June to July, blue, A. corn fields and road sides
Lycopsis arvensis, *small bugloss*, corn fields, June to July, blue, A.
Echium vulgare, *viper's bugloss*, limestone hills, July to September, white, B. Horsley Castle and limestone hills, frequent
violaceum, *violet coloured bugloss*, Ingleby meadows
Primula vulgaris, *common primrose*, hedge banks, April to May, yellow, P. on hedge banks between Brailsford and Ashbourn
elatior, *oxlip primrose*, woods, April to May, yellow, P. Mickleover and near Breadsal
officinalis, *common cowslip*, meadows and pastures, April to May, yellow, P.
veris, *great cowslip*, woods, April to May, yellow, P. Glapwell, Hardwick, &c.
Menyanthes trifoliata, *water or marsh trefoil or buckbean*, in marshes and moist meadows at Mackworth, South Normanton, and Shirley park, not common, June to July, white, P.
Hottonia palustris, *water violet*, ditches, Chester green and Dead man's lane, near Derby, June to July, flesh colour, P.

Anagallis arvensis, *scarlet pimpernel*, corn fields, June to July, scarlet, A.
tenella, *bog pimpernel or purple-flowered moneywort*, boggy places, July to Aug. rose colour, A. on Quarndon Common, Pinxton, &c.
Lysimachia vulgaris, *yellow loosestrife or willow herb*, waters and shady places, July, yellow, Markeaton woods, banks of rivers, &c.
nemorum, *pimpernel of the woods*, woods, May to October, yellow, P. Mackworth, Markeaton woods, and Coxbench
Nummularia, *creeping loosestrife*, moist shady places, June to July, yellow, P. in a meadow opposite Spondon, by the Derwent
Convolvulus arvensis, *corn bindweed*, corn fields and road sides about Derby, June to July, flesh colour
sepium, *great bindweed*, in moist hedges about Derby, common, July to August, white, P.
Polemonium cœruleum, *Greek valerian or Jacob's ladder*, mountains, June, blue, Lover's-leap, Buxton, limestone cliffs and meadows near Bakewell, Alfreton brook, Woodheaves near Ashbourn, the colour greatly exceeds that of the cultivated plant in brilliancy
Campanula rotundifolia, *round-leaved bell flower*, heaths, August to September, blue, P. High Tor, Matlock, Dale Abbey, and Chee Tor
patula, *field bell flower*, pastures, July to August, violet, B. in the Nut-wood, Darley, frequent
latifolia, *giant or broad-leaved bell flower*, shady moist places, August, purple, P. Little Chester, Dovedale, Matlock and Rowsley
Trachelium, *Canterbury bells*, woods, July, violet, Duffield, Pinxton, &c.
glomerata, *clustered bell flower*, chalky places, July, violet, on old walls at Haddon Hall, in fields on a dry soil
hybrida, *lesser Venus, looking-glass or codded corn violet*, corn fields, August, violet, not very common
hederacea, *ground ivy or alehoof*, moist shady places, June to August, blue, under hedges, very common
Jasione montana, *hairy sheep's scabious*, sandy pastures, June to July, blue, Derby, Pleasley, Wingerworth, &c.
Viola hirta, *hairy violet*, chalky soil, March to April, blue, P. Matlock bath, not very common
odorata, *sweet scented violet*, shady places, March to April, purple, P. hedge banks about Derby, frequent
palustris, *marsh violet*, mossy bogs, April, blue, Dingle near Quarndon Common and Markeaton wood
canina, *dog's violet*, heaths, April to May, blue, P. in Markeaton wood
tricolor, *pansies or heart's ease*, May to September, yellow, corn fields near Quarndon, Ripley, &c.
lutea, *yellow mountain violet*, meadow pastures, May to October, yellow, P. Dovedale, Lea, Wirksworth and High Peak
grandiflora, *great yellow violet*, Moor lands
Verbascum Thapsus, *great mullein or lady's foxglove*, road sides, July to August, yellow, Matlock, Middleton dale and Dale Abbey
Lychnitis, *white mullein*, road sides, July to August, cream colour
nigrum, *sage-leaved black mullein*, chalky soil, August, yellow, B. on dry banks at Duffield, Makeney, and Stanton by Bridge
blattaria, *yellow moth mullein*, gravelly places, July, yellow, Haddon
Datura stramonium, *thorn apple*, rubbish, July, white, A. Derby, Pinxton, &c.
Hyoscyamus niger, *henbane*, rubbish, June, straw colour, B. Darley, Little Chester, Derby, Chellaston, &c. a poisonous plant
Atropa Bella-donna, *deadly night-shade*, rubbish, June, violet, P. Repton, Horsley and Hardwick, a scarce plant, the berries and plant are poisonous
Solanum Dulcamara, *woody night-shade or bitter sweet*, hedges, June to July, violet, P. common about Derby
nigrum, *common night-shade*, rubble, June to October, white, A. in a lane leading to Normanton near Derby
Chironia Centaurium, *common centaury*, gravelly pastures, July to October, rose, high ground about Breadsall
Lonicera caprifolium, *pale perfoliate honeysuckle*, woods, May to June, yellow
periclymenum, *common honeysuckle*, hedges, May to July, yellow, Duffield and other places, frequent
Rhamnus catharticus, *purging buckthorn*, hedges, May to June, green, in hedges on the Duffield road
Frangula, *black berry or bearing alder buckthorn*, woods, May, white, S. in moist woods and hedges, frequent at Glapwell
Evonymus europæus, *spindle tree*, hedges, April to May, white, S. romantic rocks at Matlock and Stretton

Ribes rubrum, *common currant*, woods, May, green, S. Derby, Duffield and Mackworth
alpinum, *mountain currant*, woods, April to May, green, in a hedge near Ilam
grossularia, *rough gooseberry*, hedges, green, S. in a stone quarry at Horsley Castle, Duffield and Pleasley
Hedera helix, *common berried ivy*, woods, October, green, Kedleston church is completely covered with it
Vinca minor, *lesser periwincle*, bushy places, May, violet, Little Chester and near to Ashbourn
major, *greater periwincle*, groves, May, blue, Matlock bath and Pleasley park.

DIGYNIA.

Chenopodium Bonus Henricus, *English mercury or allgood*, rubbish, May to August, green, old walls and sometimes in fields
murale, *nettle-leaved goose foot*, rubbish, August to September, green, sometimes in cultivated land
rubrum, *red goose foot or sowbane*, dunghills and rubbish, August, green
urbicum, *upright blite*, dunghills and ditches by the road side, August, green
hybridum, *maple-leaved goose foot*, rubbish, August, green
album, *white orache*, rubbish, August, green, gardens and cultivated land
viride, *green goose foot*, rubbish, August, green, frequent on cultivated land
serotinum, *flag-leaved blite*, rubbish, August to October, green, dunghills
olidum, *stinking goose foot*, rubbish, August, green
polyspermum, *round-leaved goose foot, blite or allseed*, rubbish, July to August, green, dunghills and cultivated ground
Ulmus campestris, *elm tree*, hedges, April, brown, very fine near Duffield church and about Derby
montana, *broad-leaved elm or wych hazel*, woods, April, brown, not common
Anethum fæniculum, *common fennel*, dry soil, July to August, yellow
Gentiana Pneumonanthe, *marsh gentian*, moist heaths, August to September, blue
Amarella, *autumnal gentian*, August, purple, Matlock bath and High pastures, Breadsall
campestris, *field gentian*, gravelly pastures, September, purple
Sanicula europæa, *wood sanicle*, woods, May, white
Daucus carota, *wild carrot*, meadows and pastures about Derby, common, June to July, white
Scandix Pecten Veneris, *needle chervil, Venus comb or shepherd's needle*, corn fields, July, white
Anthriscus, *rough chervil*, hedge banks, May to June, white
cerefolium, *garden chervil*, hedge banks, June, white
Torilis Anthriscus, *hedge parsley*, hedge banks, May to June, white
Caucalis arvensis, *corn parsley*, corn fields, July, yellowish
Chærophyllum sylvestre, *cow parsley or wild cicely*, hedges, May to June, white
Myrrhis temulenta, *hedge chervil*, hedges, July to August
odorata, *sweet chervil*, hedges, May to June
Sium angustifolium, *water parsnip*, rivulets, July to August, white, ditches, common
nodiflorum, *creeping parsnip*, rivulets, July to August, white
Sison inundatum, *least parsnip*, rivulets, ponds and stagnated waters, May to June, white
Bunium bulbocastanum, *great earth nut, kipper nut or hawk nut*, pastures, May, white, common about Derby
flexuosum, *common pig nut*, pastures, May to June, white, common in sandy meadows about Derby
Tordylium nodosum, *knotted parsley*, on heaps of loose stones and on the sides of fields, May
Cicuta virosa, *long-leaved water hemlock or cowbane*, ditches, August, white
Æthusa cynapium, *fool's parsley*, corn fields, July to August, white, a common garden weed
Conium maculatum, *hemlock*, hedges, June to July, white
Apium graveolens, *wild celery*, ditches
Ægopodium Podagraria, *gout weed, ash weed or herb gerard*, shady places, May to June, white, under hedges and in gardens
Imperatoria Ostruthium, *masterwort*, August, white, found near Buxton, probably from a garden, it being a Scotch plant
Angelica sylvestris, *wild angelica*, moist woods, July, flesh colour
Pimpinella saxifraga, *meadow saxifrage*, dry pastures, August, white
magna, *great golden saxifrage*, woods, July to August, white, in moist grounds, in woods and near springs
Hydrocotyle vulgaris, *marsh pennywort*, marshes, May, common in boggy ground.

CLASS 6. HEXANDRIA.—MONOGYNIA.

Galanthus nivalis, *snowdrop or fair maid of February*, hedge banks, February, white, Breadsall meadow, in a meadow near Duffield and at Kirk Ireton
Narcissus pseudo-narcissus, *common daffodil*, meadows, March to April, yellow, P. it covers a whole meadow on the banks of the Derwent near Lea wood
Allium vineale, *crow garlic*, meadows, July, flesh colour, Ashover, Breadsall, &c. plentiful, a weed in grass land
ursinum, *ramsons, wild garlic*, woods, May to June, white, P. Dalbury, Darley, Derby, &c.
oleraceum, *streaked field garlic*, corn fields, July, green
Fritillaria meleagris, *common fritillary*, meadows, May, purple
Narthecium ossifragum, *Lancashire asphodel*, bogs, July to August, yellow, P. Dethicke
Hyacinthus non scriptus, *harebell hyacinth*, woods, May, blue, P. Markeaton wood, the roots are said to be poisonous
Scilla nutans, *wild hyacinth*, woods, May, blue, P. Markeaton wood
Ornithogalum luteum, *yellow star of Bethlehem*, woods, April, yellow, in the Holmes, Derby
umbellatum, *common star of Bethlehem*, meadows, April to May, white, in the Holmes, Derby
Convallaria majalis, *lily of the valley*, meadows, May, white, Dovedale and Via Gellia in abundance
multiflora, *Solomon's seal*, woods, May, white, woods opposite Matlock bath
Julipa sylvestris, *wild tulip*, meadows, April, yellow, in the Holmes, Derby
Acorus calamus, *sweet-smelling flag*, pools, June, green, P. Cutthorpe near Chesterfield. The root powdered might supply the place of foreign spices
Juncus glaucus, *hard rush*, meadows and pastures, July
conglomeratus, *common rush*, meadows and pastures, July
effusus, *soft rush*, meadows and pastures, July, canal banks
articulatus, *jointed rush*, moist pastures, June, pastures near Derby
uliginosus, *prolicerous headed*, fur heaths, June, pastures near Derby
squarrosus, *moss rush*, wet heaths, June
bulbosus, *bulbous rush*, moist meadows, June, Little Chester near Derby
bufonius, *toad rush*, moist meadows, July
Luciola campestris, *hairy field rush*, barren pastures, May to June
pilosus, *hairy rush*, meadows and pastures, April
sylvatica, *wood rush*, woods, May
Berberis vulgaris, *barberry bush*, bushy places, May to June, yellow, S. hedges at Mackworth and on the Kedleston road. This plant is injurious to corn lands
Peplis portula, *water purslane*, watery places, September, red.

TRIGYNIA.

Rumex sanguineus, *bloodwort or bloody dock*, shady places, July, B. Dethicke
crispus, *curled dock*, dry pastures, June to July
acutus, *sharp-pointed dock*, moist pastures, June
obtusifolius, *broad-leaved dock*, rubbish, July to August
pulcher, *fiddle dock*, dry meadows, August
Hydrolapathum, *water dock*, pools, July to August
maritimus, *golden dock*, July, P. Swarkstone
palustris, *yellow marsh dock*, marshes, July to August
acetosa, *meadow sorrel dock*, meadows and pastures, June, P.
acetosella, *sheep's sorrel dock*, meadows and pastures, May to June, P.
Triglochin palustre, *arrow-headed grass*, marshy meadows, July, greenish
Colchicum autumnale, *meadow saffron*, meadows, September, purple, very abundant in Breadsall meadow.

POLYGYNIA.

Alisma plantago, *great water plantain*, pits and ponds, July to August, purple
ranunculoides, *lesser thrum wort*, pools, July to August, purple, rare
lanceolata, *narrow-leaved thrum wort*, shallow waters
damasonium, *star-headed water plant*, pits and ponds, June to August, white, rare.

CLASS 7. HEPTANDRIA.

CLASS 8. OCTANDRIA.—MONOGYNIA.

Epilobium angustifolium, *rose bay willow herb*, meadows, July, purple, Darley, Matlock, and on the edge of Markeaton brook
hirsutum, *great hairy willow herb or codlins and cream*, watery places, July, pink, P.

Epilobium parviflorum, *woolly willow-herb*, watery places, July, purple, B.
montanum, *smooth-leaved willow-herb*, woods, July, purple, B.
roseum, *pale smooth-leaved willow-herb*, marshes, July, rose colour, P.
tetragonum, *square-stalked willow-herb*, marshes, July, purple, P.
palustre, *marsh willow-herb*, marshes, July, purple, P.

Acer pseudo-platanus, *the greater maple or sycamore tree*, hedges, May to June, green, Matlock, &c.
campestre, *common maple*, hedges, May to June, green, Kedleston, &c.

Chlora perfoliata, *yellow wort*, limestone hills, June to July, yellow, A. Whitwell and Pleasley park

Vaccinium Myrtillus, *black whortleberry, bilberry or piperidge bush*, moors, May to June, flesh colour, Morley moor, Wirksworth moor, &c.
Vitis Idæa, *red whortleberry*, dry heaths, May to June, flesh colour
Oxycoccus, *cranberry*, dry heaths, May to June, rose colour

Erica vulgaris,* *long grig or common heath*, moors, June to September, rose colour, Morley moor, Horsley castle, Bretby park, &c.
tetralix, *cross-leaved heath*, moors, June to September, flesh colour, East Moor
cinerea, *fine-leaved heath*, moors, June to August, purple, not very common, Crich
multiflora, *many-flowered heath*, moors, July, Ashover

Daphne mezereum, *spurge olive*, woods, February to March, rose colour, S. Matlock and Chee Tor, rare
Laureola, *spurge laurel*, woods, February to April, green, S. in a hedge near Osmaston, Matlock, Hardwick, &c.

TRIGYNIA.

Polygonum amphibium, *narrow-leaved pond weed or amphibious lake weed*, banks of rivers, July to August, rose colour, canal bank on the Nottingham road, near Derby
Persicaria, *dead or spotted arsmart*, meadows and pastures, August to September, rose colour, Mackworth
Bistorta, *bistort or greater knot grass*, June, rose colour, Crich, Normanton, Mackworth, Derby, &c. The young leaves, boiled and fried with bacon, are eaten by the common people in Derbyshire. *Pilkington.*
aviculare, *snake weed or knot grass*, rubble, April to October, greenish, B. one of the most noxious weeds that infest dry sandy soils
Fagopyrum, *buck-wheat*, corn fields, July to August, flesh colour, A. Chesterfield. Some experienced farmers say, from the quick and luxuriant growth of this plant, it is an admirable destroyer of weeds; and in numerous cases, supersedes the use of summer fallowing
Convolvulus, *black bindweed*, corn fields, June to September, white, A.

TETRAGYNIA.

Paris quadrifolia, *true-love or herb Paris*, woods at Matlock, Pinxton, Newton wood, and in an island in the Derwent, Darley, near Derby, May, green

Adoxa Moschatellina, *tuberous moschatel*, in the nutwood, Darley, and in Mileash lane, leading to Darley, April to May, green, common.

CLASS 9. ENNEANDRIA.—HEXAGYNIA.

Butomus umbellatus, *flowering rush or water gladiole*, ponds, &c. June to July, rose colour, Repton ponds, Anchor Church, Borrowash, &c.

* Heath, called ling in England and heather in Scotland. When dry pastures abound with this plant, they take the name of heaths, and can only be extirpated by paring and burning, and converting the pasture into tillage; this has been effected with profit by several occupiers of such land in this county. It is the most valuable material for the construction of bush drains. Bees extract honey largely from the flowers, which is of a good quality, but of a reddish colour. In the highlands of Scotland, the poorer inhabitants use it in the construction of their cottages, and also use it for their beds. Scott says,

> ——————— the stranger's bed
> Was there of mountain heather spread;
> Where oft a hundred guests had lain,
> And dreamed their forest sports again;
> Nor vainly did the heath-flower shed
> Its moorland fragrance round his head.

In the island of Hay, ale is often made by brewing one part of malt and two parts of the young tops of heath; sometimes they add hops. Boethius relates, that this liquor was much used by the Picts. Sheep and goats will sometimes eat the tender shoots, but they are not fond of them. Cattle, not accustomed to browse on heath, Linnæus says, give bloody milk at first, but are soon cured by drinking plentifully of water. The branches of heath afford shelter, and the seeds a principal part of the food of many birds, especially those of the grouse kind; and the seed-vessels are formed in such a manner, that the seeds are preserved a whole year. In the north of Scotland ropes are made of it, as strong, as durable, and nearly as pliant as hemp.—Farey calls these plants worthless and detrimental.

CLASS 10. DECANDRIA.—MONOGYNIA.

Monotropa Hypopithys, *primrose scented bird's nest*, woods, June, straw colour
Andromeda polifolia, *marsh cistus or wild rosemary*, bogs, June, flesh colour, Axe-edge and Buxton
Arbutus Uva ursi, *red-berried trailing arbutus*, heaths, June, flesh colour, rocks over the Burbage, East Moor
Pyrola rotundifolia, *winter green*, woods, July, white, Woodlands. *Mr. Knowlton.*

DIGYNIA.

Chrysoplenium alternifolium, *golden saxifrage or sengreen*, woods, April to May, yellow, in the Nutwood, Darley, and in the walk leading to Bonsal
oppositifolium, *opposite-leaved saxifrage*, woods, April, yellow, back of Saxton's, Matlock bath, and Quarndon
Saxifraga granulata, *white saxifrage*, limestone hills, May, white, in Alvaston meadows, on a bank near Osmaston, and Duffield
tridactylites, *rue-leaved saxifrage*, walls, April, white, Buxton, and common on the walls about Derby
cæspitosa, *tufted alpine saxifrage*, walls, &c. June, cream colour, Castleton
hypnoides, *mossy saxifrage*, walls, &c. May, white, Dovedale, Castleton and Buxton
Scleranthus annuus, *German knot-grass*, corn fields, August, green
Saponaria officinalis, *soapwort*, hedges, August to September, bluish, Duffield
Dianthus Armeria, *pheasant's-eye pink*, gravelly pastures, July to August, red, Edensor
deltoides, *maiden pink*, gravelly pastures, July to October, flesh colour, Bakewell hills, and on the road from Derby to Nottingham.

TRIGYNIA.

Silene anglica, *English catchfly*, sandy fields, July, white
quinquevulnera, *variegated catchfly*, sandy fields, June to July, blood colour
nutans, *Nottingham catchfly*, rocks, June to July, white, Dovedale and Middleton dale
acaulis, *moss champion catchfly*, rocks, June to July, rose colour
inflata, *spattling poppy, white bottle or bladder champion*, waste places, July to August, white, P. in the fields leading from Matlock to Bonsal
Stellaria holostea, *great stitchwort*, woods, May, white, P. Derby, Duffield, Mackworth and Pinxton
nemorum, *wood stitchwort*, woods and banks of rivers, June, white, P. Duffield
graminea, *lesser stitchwort*, hedge banks, May, white, Derby and Pinxton
glauca, *glaucous marsh stitchwort*, moist meadows, June to July, white
uliginosa, *bog stitchwort*, rivulets, June, white
media, *common chickweed*, cultivated land, white, common in almost every situation
Arenaria trinervis, *plantain-leaved sandwort*, hedges, May to June, white, A.
serpyllifolia, *thyme-leaved sandwort*, walls, May to June, white, Matlock
laricifolia, *larch-leaved sandwort*, June, P. Crich and Middleton dale
rubra, *purple sandwort*, sandy fields, July to August, purple, corn fields near Quarndon
verna, *vernal sandwort*, mountains, May to August, white, P. abundant near the mouths of mines, Matlock, &c.
saxatilis, *rock sandwort*, June, Middleton dale.

PENTAGYNIA.

Cotyledon Umbilicus, *kidney wort or wall pennywort*, old walls, June to July, yellowish, on the rock at Anchor Church near Ingleby
Sedum Telephium, *orpine livelong stonecrop*, borders of fields, August, purple, P. Dethick, and on the banks of the Dove, Dovedale
dasyphyllum, *round-leaved stonecrop*, walls, June, white, P. Pinxton. *Mr. Coke.*
acre, *pepper stonecrop*, walls, June, yellow, P. Derby, Matlock, Makeney and South Normanton
sexangulare, *insipid stonecrop*, walls, June to July, yellow
album, *white stonecrop*, rocks, July, white
reflexum, *yellow stonecrop*, walls, July, yellow
Oxalis Acetosella, *common wood sorrel, cuckoo bread or sour trefoil*, groves, April to May, flesh colour, P. Nutwood at Darley, plantations at Markeaton, &c.
Agrostemma Githago, *corn cockle*, corn fields, June to July, purple, A. Breadsall
Lychnis flos-cuculi, *meadow pinks, wild Williams, ragged Robins or cuckoo flower*, June, rose colour, P. between the old Uttoxeter road and Thornhill
dioica, *red and white flowered champion cuckoo flower*, moist woods, May to Oct. red and white, P. in the plantations at Markeaton, and all the woods about Derby. Frequent in hedges and amongst corn

Cerastium vulgatum, *clammy mouse-ear chickweed*, sandy places, April to May, white, in a meadow near the Markeaton brook, between Matlock and Bonsal, &c.
viscosum, *narrow leaved mouse-ear chickweed*, pastures, May to September, white, on the Ashbourn road, near Derby
semi-decandrum, *least mouse-ear chickweed*, rubble, April to August, white, A. Morley moor, near to Horsley Castle, and Pinxton
arvense, *field mouse-ear chickweed*, corn fields, May to August, white, P.
aquaticum, *great marsh mouse-ear chickweed*, watery places, July, white, P. Siddals, near Derby
tomentosum, *woolly mouse-ear chickweed*, July, Kedleston
Spergula arvensis, *corn spurrey*, sandy fields, July to August, white, Priory near Breadsall and in a corn field near Quarndon
nodosa, *knotted spurrey*, sandy fields, July to August, white.

CLASS 11. DODECANDRIA.—MONOGYNIA.

Lythrum Salicaria, *purple spiked willow herb or loosestrife*, banks of the canal between Derby and Breadsall, and in the Wilderness at the Priory, near Breadsall.

DIGYNIA.

Agrimonia Eupatoria, *common agrimony*, borders of fields, June to July, yellow, in a field on Thornhill farm, near Derby, between Matlock and Bonsal, Duffield, &c.

TRIGYNIA.

Reseda luteola, *wild woad or dyer's weed*, waste ground, June to July, yellow, A. Allestree, Chesterfield, Derby, Duffield, Matlock, &c.
lutea, *yellow weed or base rocket*, dry soil, July, yellow, in a meadow by the side of the Derwent, Matlock
Euphorbia Peplus, *petty spurge*, cultivated ground, June, yellow, A. Derby
exigua, *dwarf spurge*, corn fields, July, yellow, A. Pinxton, and near Breadsall, Priory
helioscopia, *wartwort, churnstaff, cat's milk or sun spurge*, corn fields, July, yellow, A. Derby, Pinxton, &c.
platyphylla, *broad-leaved spurge*, corn fields, July to August, yellow
amygdaloides, *wood spurge*, woods, April, yellow, Chaddesden, common
verrucosa, *rough-fruited spurge*, meadows and pastures, August
Characias, *red spurge*, woods, March to April, purple.

DODECAGYNIA.

Sempervivum tectorum, *common house leek or sengreen*, roofs, July, flesh colour.

CLASS 12. ICOSANDRIA.—MONOGYNIA.

Prunus Padus, *bird cherry*, woods, May, white, Chee Tor, Matlock, and between Dovedale and Woodheaves
cerasus, *wild cluster or cherry tree*, woods, May, white, Bretby, Derby, Glapwell, Mackworth, &c.
domestica, *plum tree*, hedges, April, white, in a hedge in the Humbleton farm, near Derby
insititia, *bullace tree*, hedges, April, white, near Mackworth, Pinxton, &c.
spinosa, *sloe tree or black thorn*, hedges, March to April, white, in a field leading to Thornhill farm, near Derby. The tender leaves have been recommended as a substitute for tea. Letters written on linen or woollen with the juice of the fruit, will not wash out
avium, *black cherry tree*, Derby and Pinxton.

DIGYNIA.

Cratægus aria, *white beam tree, wild pear tree or hawthorn*, fissures of the rocks, opposite the old bath, Matlock
oxycantha, *common hawthorn*, hedges, May to June, white.

TRIGYNIA.

Sorbus aucuparia, *quicken tree, mountain ash, roan, or tree service*, woods, May, white, Matlock, and Haddon pastures
domestica, *true service tree*, woods, May, white, Crich and Matlock.

PENTAGYNIA.

Pyrus communis, *pear tree*, woods, April to May, white, Matlock, and between Morley and Stanley
Malus, *crab tree or wilding*, woods, April, white, in hedges between Etwall and Hilton, &c.

Pyrus torminalis, *wild service*, woods, April to May, white
Spiræa Filipendula, *common dropwort*, meadows and pastures, July, white
ulmaria, *meadow sweet*, moist meadows, June to July, white, Derby, Duffield, Pinxton, &c.
salicifolia, *willow-leaved dropwort.*

POLYGYNIA.

Rosa spinosissima, *burnet rose*, sandy heaths, July, white, S. hedges and pastures at Rough Heanor
arvensis, *white dog rose*, hedges, May to June, white, S. common
villosa, *apple rose*, moist woods, June, rose colour, S. Hathersage, Dovedale and Rough Heanor
tomentosa, *downy-leaved dog rose*, hedges, June to July, rose colour, S.
rubiginosa, *sweet briar rose*, hedges, June to July, rose colour, S. Rough Heanor
canina, *red dog rose or hep tree*, hedges, June, flesh colour, S. common
Rubus idæus, *raspberry*, woods, May to June, white, Bretby woods, Crich woods, Alderwasley woods, &c.
cæsius, *dewberry bush*, borders of fields, June to July, white, in Radbourn lane, Nutwood at Darley, &c.
fruticosus, *bramble blackberry*, hedges, July to August, bluish, common
saxatilis, *stone bramble or cloudberry*, mountains, June, white, hills opposite Matlock bath
Chamæmorus, *mountain bramble*, mountains, June, white, Kinder-Scout and Axe-Edge. *Mr. Knowlton.*
Fragaria vesca, *wood strawberry*, woods, May to June, white
sterilis, *barren strawberry*, barren pastures, March to April, white, Allestree
Potentilla anserina, *wild tansey or silver weed*, moist meadows, June to July, yellow, P. road sides about Derby, Sinfin moor and Hartington, common
argentea, *hoary or silvery cinquefoil*, gravelly pastures, June, yellow, on the Markeaton road, near Derby lodge
reptans, *common cinquefoil*, meadows and pastures, June to August, yellow, P.
Tormentilla officinalis, *common tormentil*, June to July, yellow, P. Normanton, Radbourn, Quarndon common and Morley moor
reptans, *trailing tormentil*, June to July, yellow, P. The roots are powerfully astringent; they are used, Dr. Withering informs us, in several counties, to tan leather: and that farmers find them efficacious in the dysentery of cattle. They dye red
Geum urbanum, *herb bennet or common avens*, woods, May to August, yellow, hedges on the Kedleston road, near Derby, &c.
rivale, *water avens*, moist meadows, June to July, reddish, P. Hassop, Pinxton and Chee Tor
Comarum palustre, *marsh cinquefoil*, old pits, June to July, purple.

CLASS 13. POLYANDRIA.—MONOGYNIA.

Chelidonium majus, *great celandine*, rubble, May to June, yellow, P. Little Eaton, Mackworth and Matlock
Papaver Argemone, *rough-headed poppy*, corn fields, June to July, scarlet, A. Chaddesden, Spondon, Stanton by Bridge, &c.
dubium, *smooth-headed poppy*, sandy fields, June to July, scarlet, A. Chaddesden, Spondon, Stanton by Bridge, &c.
Rhœas, *common red poppy*, corn fields, June to July, scarlet, A. Chaddesden, Spondon, Stanton by Bridge, &c.
somniferum, *white poppy*, corn fields, July, white, A. Chaddesden, Spondon, Stanton by Bridge, &c.
Nuphar lutea, *yellow water lily*, rivers, July, yellow, P. Repton, Hardwick, Breadsall, Priory and Winfield
Nymphæa alba, *white water lily, watercan or candock*, rivers, July, white, P. Wingerworth, Swarkstone, and Anchor Church ponds, and in a slow stream at West Hallam
Tilia europæa, *common lime or linden tree*, woods, July, yellowish, very fine avenue at Brislingcote
Cistus Helianthemum, *little sun flower or dwarf cistus*, moist pastures, July to August, yellow, P. Ashover, Clown, Matlock and Middleton dale.

PENTAGYNIA.

Aquilegia vulgaris, *columbine*, meadows and pastures, July, violet, Matlock, at the back of Haddon hall, and Buxton.

POLYGYNIA.

Anemone nemorosa, *wood anemone*, woods, April, white, P. meadows about Breadsall, Nutwood at Darley, &c.

Thalictrum minus, *lesser meadow rue*, dry pastures, June to July, purplish, P. Castleton
flavum, *common meadow rue*, moist meadows, July, ochre, P. banks of the Derwent, below Derby, Alfreton, Duffield, &c.
Clematis vitalba, *traveller's joy or great wild climber*, hedges, July, white
Caltha palustris, *marsh marigold*, marshes, May, yellow, P. Breadsall meadow, &c.
Ranunculus Flammula, *lesser spearwort or crowfoot*, watery places, June to September, yellow, P. in the boggy part of a meadow near Breadsall
lingua, *great spearwort or crowfoot*, muddy ditches, July, yellow, P. Ingleby and Knowl hills, South Normanton, &c. *Mr. Coke*
Ficaria, *common pilewort*, April, yellow, P. pastures and hedge banks, common
auricomus, *wood crowfoot or goldilocks*, woods, April to May, yellow, in the plantations at Markeaton, &c.
sceleratus, *water crowfoot*, watery places, June to August, yellow, in shallow water near Dead man's lane
bulbosus, *butter cup or gold cup*, meadows and pastures, May, yellow, in a meadow above Little Chester, opposite Darley, where beautiful specimens with full double flowers may be found
hirsutus, *pale hairy crowfoot*, corn fields, June to October, yellow, A.
repens, *creeping crowfoot*, meadows and pastures, June to August, yellow, P.
acris, *upright meadow crowfoot*, meadows and pastures, June to July, yellow, P.
arvensis, *corn crowfoot*, June, yellow, A. in corn fields at North Winfield and about Breadsall
parviflorus, *small flowered crowfoot*, gravelly places, May to June, yellow, on the bank of the canal, near Borrowash
hederaceus, *ivy-leaved crowfoot*, watery places, May to August, yellow, P. South Normanton, and in a ditch at Osmaston, by the side of the Chellaston road
aquatilis, *fennel-leaved crowfoot*, ditches, May to June, yellow, Markeaton brook, in the river Derwent, Ecclesbourne and Duffield
Trollius Europæus, *globe flower or locker gowlans*, May to June, yellow, Via Gellia, near to Bonsal, Litton dale, Ash dale, Buxton, and Demon's dale, Taddington. *Botanist's Guide*
Helleborus viridis, *green hellebore*, woods, April, green, P. in a field opposite Quarndon school, Matlock and Codnor castle
fœtidus, *stinking hellebore, setterwort, ox heel or bear's foot*, high pastures, Mar. to April, green, P. romantic rocks at Matlock, Cromford moor and Dethick.

CLASS 14. DIDYNAMIA.—GYMNOSPERMIA.

Ajuga reptans, *common bugle*, woods, May, blue, P. plantations at Markeaton, and woods at Matlock
alpina, *alpine bugle*, mountains, July, blue, summit of a mountain near Castleton. *Mr. Dawson Turner*
Teucrium Scorodonia, *wild germander or wood sage*, woods, July, yellow, in a lane between Locko park and Dale Abbey, Duffield bank, &c. common
Nepeta cataria, *cat mint*, road sides, July, white, in the lane between Derby and Normanton
Verbena officinalis, *common vervain*, road sides, July, purple, in a piece of waste ground by the large silk mills, Derby, and Duffield bridge
Mentha sylvestris, *horse mint*, watery places, August to September, lilac, Longford brook
rotundifolia, *round-leaved mint*, moist places, August to September, reddish, near a brook on the Uttoxeter road
viridis, *spear mint*, marshes, August, purple, banks of the Derwent, Duffield
piperita, *peppermint*, watery places, August to September, purple, Bonsal dale, Anchor Church and South Normanton
odorata, *bergamot*, watery places, July to August, red
hirsuta, *hairy mint*, watery places, August to September, lilac, Sinfin moor
acutifolia, *fragrant sharp-leaved mint*, watery places, September, lilac
rubra, *tall red mint*, watery places, September, purple
arvensis, *corn mint*, corn fields, June to September, blue, P. in the water at Kedleston park
aquatica, *water mint*, watery places, August, by the side of a brook near Thornhill farm
citrata, *lemon mint*
Pulegium, *pennyroyal*, wet commons, September, purple, Langley common, Ockbrook and Radbourn
Glechoma hederacea, *ground ivy, cat's foot or alehoof*, hedge banks, April to May, blue. Mrs. Hardcastle found, for many successive years, a beautiful pure white variety, growing in a shady corner, by the brook which runs through the

meadows between the Uttoxeter road and Thornhill farm. Transplanted to the garden the character remains unchanged

Lamium album, *white archangel or dead nettle*, hedge banks, May to September, white, P.
purpureum, *red dead nettle*, hedge banks, May, purple
amplexicaule, *great henbit*, sandy fields, February to June, rose colour

Galeopsis ladanum, *red hemp nettle*, corn fields, June to September, rose colour, P. Pinxton
Tetrahit, *common hemp nettle*, corn fields, July to September, white
versicolor, *large flowered nettle*, corn fields, July to August, yellow, between Matlock and Duffield

Galeobdolon luteum, *yellow dead nettle or weasel snout*, moist shady places, May, yellow, P. Quarndon, Duffield and Derby

Betonica officinalis, *wood betony*, woods, July to August, purple, Allestree, Horsley, Bretby and Crich woods

Stachys sylvatica, *hedge nettle*, hedges, July to August, blood colour, P.
palustris, *all heal or wound wort*, moist meadows, August, purple
germanica, *downy wound wort*, corn fields, July, purple, Pinxton
arvensis, *corn wound wort*, corn fields, July to August, purple, A.

Ballota nigra, *stinking horehound*, hedges, July to August, purple, near Windmill pit, Derby

Marrubium vulgare, *white horehound*, rubble, July, white, P. Derby and Middleton dale

Clinopodium vulgare, *great wild basil*, bushy places, August, rose colour, Bolsover, Chaddesden, Glapwell and Pinxton

Leonorus cardiaca, *motherwort or lion's tail*, hedge banks, July to August, white, Mackworth and Handley

Origanum vulgare, *common marjoram*, hedges, July to August, rose colour, P. Crich, Clown, Dovedale and Matlock

Thymus Serpyllum, *wild thyme*, heaths, July to August, purple, P. Buxton, Littleover, Matlock and Peak forest. It yields an essential oil, which is very heating; an infusion of the leaves removes the headache occasioned by the debauch of the preceding evening
Acinos, *wild basil thyme*, dry hills, July to August, violet, A. Dovedale and Glapwell
Calamintha, *calamint balm*, borders of fields, July to August, violet. From the garden of A. N. Moseley, esq. of Park Hill, who thought that it had been found growing wild not far from that place

Scutellaria galericulata, *scull cap or willow herb*, watery places, July to August, blue, P. Pinxton, and on the banks of the Mill dam, near Derby
minor, *lesser scull cap or willow herb*, moist heaths, August, pink, P.

Prunella vulgaris, *common self heal*, meadows and pastures, July to August, violet, P.

Melittis melissophyllum, *bastard balm or balm leaf*, woods, May to June, flesh colour, between Sinfin and Barrow.

ANGIOSPERMIA.

Bartsia odontites, *purple eyebright*, meadows and pastures, July to August, purple, Breadsall, Matlock, and Radbourn lane

Rhinanthus Crista-galli, *cock's comb or yellow rattle*, meadows and pastures, June, yellow, in a field between Matlock and Bonsal

Euphrasia officinalis, *common eyebright*, pastures, July to September, white, Quarndon, Dovedale, and Radbourn lane

Melampyrum pratense, *common cow wheat*, woods, July to August, yellow, Morley moor, on the side nearest to Horsley castle

Lathræa squamaria, *great toothwort*, shady places, April, purple

Pedicularis palustris, *marsh lousewort*, boggy marshes, June to July, purple, Quarndon common and Breadsall
sylvatica, *pasture lousewort*, moist heaths, June to July, rose colour, Quarndon common and Breadsall

Antirrhinum Cymbalaria, *ivy-leaved snapdragon*, old walls, May to November, violet, stone walls at Matlock, and rocks in Mr. Arkwright's grounds, Cromford, Morley, and Millford bridge
Elatine, *sharp-pointed fluellin*, corn fields, August to September, yellow
Linaria, *common yellow snapdragon*, hedges, July to August, yellow, P. Breadsall and various other places. An infusion of the leaves is diuretic and purgative. The expressed juice, mixed with milk, is a poison to flies
minus, *least snapdragon or calf's snout*, sandy fields, July to August, violet
majus, *great snapdragon*, walls, July to August, rose colour, Matlock
palustris, *marshy snapdragon*,

Scrophularia nodosa, *knobby rooted figwort*, woods, July, blood colour, on the banks of the Derwent, about Derby, frequent

Scrophularia aquatica, *water betony or figwort*, watery places, July, blood colour, by the boat house, Darley
Digitalis purpurea, *common foxglove*, hedge banks, June to July, purple, Stanton by Bridge, Quarndon, Matlock and Horsley castle
var. alba, *white foxglove*, hedge banks, June to July, white
Orobanche major, *greater bromerape*, uncultivated places, May to June, purplish, in the highest part of the woods upon the rock opposite Matlock bath, and Little Eaton
ramosa, *branched bromerape*, August to September, bluish, in a young fir plantation by the side of a high corn field, at Ingleby, near Anchor Church.

CLASS 15. TETRADYNAMIA.—SILICULOSA.

Draba verna, *common whitlow grass*, walls, March to April, white, on the wall surrounding Mackworth church yard
muralis, *speedwell leaved whitlow grass*, fissures of rocks, May, white, A. on limestone rocks near the house of the Rev. E. Carr, Parwich
Lepidium campestre, *mithridate mustard or bastard cresses*, June to July
latifolium, *broad-leaved pepperwort*, pastures, July, white
Hutchinsia petræa, *rock cresses*
Teesdalia nudi-caulis Liberis, *naked-stalked cresses*, Middleton dale. *Mr. Coke*
Thlaspi alpestre, *alpine shepherd's purse*, meadows and pastures, June to July, white, on limestone rocks, and about lead mines at Matlock
Bursa pastoris, *common shepherd's purse*, March to September, white, A. in fields and road sides, on cultivated ground
Cochlearea officinalis, *garden scurvy grass*, May, white, near the great cavern, Castleton, and Wirksworth
Armoracea, *horse raddish*, watery places, May, white
Coronopus Ruellii, *swine's cress*, road sides, June to July, white, Duffield.

SILIQUOSA.

Cardamine impatiens, *impatient ladies' smock*, rocks, May to June, white, abundant in the woods opposite the Matlock old bath
hirsuta, *hairy-leaved ladies' smock*, moist shady places, March to June, white
pratensis, *common meadow ladies' smock*, meadows and pastures, April to May, purple, Breadsall meadows, and fields about Derby
Amara, *bitter cress or ladies' smock*, watery places, April to May, white, by the side of the Markeaton brook, near a field on the Kedleston road
Erysimum barbarea, *winter cress or rocket*, rivulet banks, May to August, yellow
Alliaria, *Jack by the hedge, sauce alone or garlic wormseed*, hedges, May, white
cheiranthoides, *treacle hedge mustard*, July, yellow, hedge banks near Ashbourn
Nasturtium officinale, *water cress*, rivulets, June to July, white, Via Gellia brook, and other brooks and springs, very fine
sylvestre, *winter cress or water rocket*
terrestre, *land rocket*
amphibium, *water raddish*, June
Sisymbrium officinale, *hedge mustard*, May
monense, *dwarf sea rocket*, sandy banks, June to July, yellow, Old Meadows on the banks of the Derwent
Sophia, *flix weed or water cress*, waste ground, July, yellow, on rubbish between Derby and Shardlow
Arabis thaliana, *podded mouse ear, turkey pod or wall cress*, walls, April, white, on the wall round Mackworth church yard and at Langley
Turrita, *tower wall cress*, walls, May, sulphur, Matlock, near the entrance to the Cumberland cavern
hispida, *alpine rock cress*, Middleton dale. *Mr. Coke*
Brassica Rapa, *wild rape or turnip cabbage*, corn fields, April, yellow.
Turritis glabra, *smooth tower mustard*, gravelly pastures, May to June, white, Masson hill, near Smedley's cavern
hirsuta, *hairy tower mustard*, old walls, May, white, Masson hill, near Smedley's cavern
Sinapis arvensis, *rough charlock or wild mustard*, corn fields, May, yellow
alba, *white mustard*, corn fields, June, yellow
nigra, *black mustard*, borders of fields, June, yellow
Raphanus Raphanistrum, *wild raddish*, corn fields, June to July, yellow.

CLASS 16. MONADELPHIA.—PENTANDRIA.

Erodium cicutarium, *hemlock crane's bill*, road sides, June to August, purple, P.
moschatum, *musk crane's bill*, meadows and pastures, June to July, purple.

DECANDRIA.

Geranium sylvaticum, *wood crane's bill*, meadows and pastures, June to July, purple, in a wood at the foot of the Zig Zag walk, Matlock
pratense, *crowfoot leaved crane's bill*, meadows and pastures, June to July, blue, P. Breadsall, and in a meadow on the Markeaton road
robertianum, *stinking crane's bill or herb Robert*, stoney places, May to October, purple, B. frequent about Derby
lucidum, *shining crane's bill*, stoney places, May to August, rose colour, Dethick, Matlock bath, Peak's hole and Winfield manor
molle, *dove's foot crane's bill*, waste ground, April to August, purple, A. on the Ashbourn road
rotundifolium, *round-leaved crane's bill*, walls, June to July, rose colour, A. on a dry bank on the Markeaton road
dissectum, *jagged-leaved crane's bill*, waste ground, May to June, purple, A. Derby, Pinxton, &c.
columbinum, *long-stalked crane's bill*, corn fields, June to July, rose colour, A. Matlock, Middleton dale and Dovedale
sanquineum, *bloody crane's bill*, meadows and pastures, June to October, blood colour, P. Buxton rocks, and opposite Haddon hall

Malva sylvestris, *common mallow*, waste places, May to August, purple, on the Kedleston road and near Markeaton
rotundifolia, *dwarf mallow*, road sides, May to July, flesh colour, at the foot of the High Tor, Matlock
moschata, *musk mallow*, borders of fields, May to August, rose colour, very frequent about Shardlow, Dale Abbey, Spondon and various other places.

CLASS 17. DIADELPHIA.—HEXANDRIA.

Fumaria lutea, *yellow fumatory*, old walls, May, yellow, Castleton, *Smith's Fl.* behind a hovel in a path leading from the temple to the lead mines, top of Masson hill. *Mrs. Lucy Hardcastle*
officinalis, *common fumatory*, gardens, corn fields, and sometimes old walls, April to August, rose colour, common about Derby
claviculata, *white climing fumatory*, on walls, in hedges and woods, August, white, in a dingle on Quarndon common, and in a fox cover near Horsley castle.

OCTANDRIA.

Polygala vulgaris, *common milkwort*, meadows and pastures, May to June, about Matlock, in all the variety of colours, blue, pink and white, also in the high and dry grounds near Derby.

DECANDRIA.

Spartium scoparium, *common broom*, dry pastures, May to June, near Breadsall and near Belper lane end, common

Genista tinctoria, *wood waxen, greenwood or dyer's broom*, dry pastures, July, yellow, common. It gives a bitter taste to the milk of cows when they feed upon it
anglica, *needle furze, petty whin or hengorse*, moist heaths, April to September, yellow, turnpike road leading to Burton, and near the pastures, Egginton

Ulex europæus, *common furze, whins or gorse*, heaths and barren neglected land, May to September, yellow, Morley moor, Horsley castle, and between Findern and Willington
nanus, *dwarf furze*, Dovedale, August to October, yellow

Ononis spinosa, *thorny rest harrow, petty whin or ground furze*, dry pastures and hedge banks, August to October, yellow, in a lane leading to Radbourn
arvensis, *hairy rest harrow*, barren pastures, June to August, near Breadsall, more common than the preceding species

Anthyllis vulneraria, *kidney vetch or lady finger*, dry pastures, June to August, yellow, frequent on the top of Masson hill, among the lead mines

Orobus tuberosus, *heath pea or wood pea*, woods and pastures, May, purple, Nutwood at Darley near Derby, and frequent about Matlock

Lathyrus Nissolia, *grass vetch*, woods and pastures, July to August, crimson, Nutwood at Darley
hirsutus, *rough-podded lathyrus*, borders of fields, South Normanton, July, purple
pratensis, *meadow vetchling or tare everlasting*, meadows and pastures, July to August, yellow, Kedleston, Markeaton woods, and various other places
sylvestris, *narrow-leaved pea everlasting*, moist woods, July to August, yellow
latifolius, *broad-leaved pea everlasting*, woods, July to August, rose colour

Vicia sylvatica, *wood vetch*, woods, July to August, white, Heights of Abraham, Matlock, in a walk high in the rock behind Saxton's Matlock bath, not far from

the entrance of Skidmore's cavern, but on the opposite side of the path. This beautiful plant also grows near Dovedale, Duffield, and various other places

Cracca, *perennial tufted vetch*, meadows and hedges, July to August, violet
sativa, *common vetch*, corn fields, May to June, purple, common about Derby
sepium, *bush vetch*, hedges, May to June, blue, common
Ervum tetraspermum, *smooth podded tare*, corn fields, June, purple, in the path up the rock behind Phœbe's cottage, Matlock
hirsutum, *small wild rough podded tare*, corn fields and hedges, July, blue, Quarndon common
Ornithopus perpusillus, *common bird's foot*, dry pastures, May to August, reddish, on the highest part of Quarndon common and Chevin
Hedysarum Onobrychis, *medick vetchling or cock's head*, gravelly fields, July, rose colour, not common
Astragalus glycyphyllos, *liquorice vetch*, ditch banks, June, yellow
Trifolium officinale, *melilot*, in fields, among corn, and under hedges, July to August, common
repens, *white trefoil or Dutch clover*, meadows and pastures, May to September, white, common
pratense, *honeysuckle trefoil or common clover*, meadows and pastures, May to September, purple, common
medium, *long-leaved purple trefoil, cow or perennial clover*, meadows and pastures, June to July, purple
fragiferum, *strawberry trefoil*, moist meadows, July to August, flesh colour, Duffield
arvense, *hare's foot trefoil*, meadows and pastures, July to August, flesh colour
procumbens, *hop trefoil*, meadows and pastures, May to August, yellow, in sandy and gravelly soils
arabica, *heart trefoil or claver*, meadows and pastures, May
minus, *lesser yellow trefoil*, dry pastures, June to July, yellow
striatum, *knotted trefoil with softer heads*, dry pastures, July, purple
filiforme, *least hop trefoil*, sandy pastures, May to June, not very common
Lotus corniculatus, *bird's foot trefoil or claver*, meadows and pastures, June to August, yellow, Matlock, Morley moor, Quarndon, and in most dry situations
major, *great bird's foot trefoil*, meadows and pastures, June to August, yellow
Medicago lupilina, *melilot or black medick trefoil*, pastures and heaths, in light soil, May to August, yellow, Little Eaton
maculata, *spotted melilot.*

CLASS 18. POLYADELPHIA.—POLYANDRIA.

Hypericum androsœmum, *tutsan or St. John's wort*, woods and moist hedges, July to August, yellow
quadrangulum, *St. Peter's wort*, moist meadows and hedges, August, yellow, in a wood near Wheathill, and by the brook in a field leading to Thornhill farm
perforatum, *common St. John's wort*, groves, July to August, yellow, on the Kedleston road, near Quarndon
dubium, *imperforate St. John's wort*, woods, July to August, yellow
humifusum, *trailing St. John's wort*, dry pastures, July, yellow, Dale Abbey, and in a lane near Locko park
montanum, *mountain St. John's wort*, moist hedges and road sides, July, yellow, Deadman's lane, near Derby
hirsutum, *hairy St. John's wort*, watery hedges and road sides, Deadman's lane, near Derby, July, yellow
pulchrum, *heart-leaved or upright St. John's wort*, woods, July, yellow, on the road between Spondon and Locko, in a dry bank, and on Morley moor
elodes, *marsh St. John's wort*, watery places, July to August, yellow.

CLASS 19. SYNGENESIA.—POLYGAMIA ÆQUALIS.

Trogopogon pratensis, *go-to-bed-at-noon or yellow goat's beard*, pastures, B. June, yellow, in pastures at Darley, near Derby, and Pinxton
porrifolius, *salsafy or purple goat's beard*, in the high fields between Matlock bath and Bonsal, May to June, purple
Picris hieracioides, *Langue de bœuf or ox tongue*, borders of fields, July to August, yellow
Sonchus palustris, *marsh sowthistle*, banks of rivers, July to August, yellow
arvensis, *corn sowthistle*, corn fields, August, yellow
oleraceus, *common sowthistle*, cultivated land and gardens, June, yellow
Lactuca virosa, *strong scented lettuce*, on banks, under hedges and the borders of fields, B. July to August, yellow, Matlock. *Mr. Coke*
scariola, *prickly or mild scented lettuce*, about Peak's hole, B. August, yellow

Prenanthes muralis, *wall ivy leaved lettuce*, woods, July, yellow, about Matlock and Duffield bridge, frequent

Leontodon Taraxacum, *dandelion*, in meadows and pastures, P. April to September, yellow, common

autumnale, *hawkweed with bitter roots or yellow devil's bit*, in open fields and commons, July to August, yellow

Apargia hispida, *rough hawkbit or hawkweed*, meadows and pastures, P. June to July, common

hirta, *prickly hawkbit*, meadows and pastures,

autumnalis, *autumnal hawkbit*, meadows and pastures, July to August

Hieraceum Pilosella, *mouse-ear hawkweed*, dry pastures and hedge banks, May to July, yellow, Derby and Mackworth

dubium, *creeping hawkweed*, mountains, P. July to August, yellow, Coxbench wood

murorum, *French lungwort*, hedge banks, P. July, yellow, Derby and Pinxton

sylvaticum, *wood hawkweed*, woods, August, yellow

paludosum, *marsh or mountain hawkweed*, mountains, July, yellow

villosum, *alpine hawkweed*, alpine rocks, August, yellow

sabaudum, *shrubby hawkweed, with broad rough leaves*, on heaths, in woods and hedges, P. July to August, yellow, Brampton

umbellatum, *bushy hawkweed*, woods, August to September, yellow

Crepis tectorum, *smooth succory*, pastures, A. June to September, yellow, Pinxton

Hypochœris radicata, *long-rooted hawkweed or cat's ear*, meadows and pastures, P. June to August, yellow, common

Lapsana communis, *nipplewort*, under hedges, on rubbish, gardens and cultivated land, June to September, yellow, common

Cichorium Intybus, *wild succory*, chiefly on dry banks, July to August, blue, in the road leading to Swarkstone bridge, nearly upon the bridge

Arctium Lappa, *common clot burr or burdock*, rubbish, B. July to August, purple, on almost every road side

Bardana, *taller burdock, with woolly heads*, on the sides of roads, July to August, purple, not uncommon

Serratula tinctoria, *sawwort*, woods, P. July, August, purple

Carduus nutans, *musk thistle*, pastures in calcarious soil, P. July to August, purple, common

Acanthoides, *welted thistle, with small flowers*, road sides, dry ditch banks, and on rubbish, June to July, purple, not uncommon

tenuiflorus, *slender flowered thistle*, hedge banks, June to July, purple

marianus, *milk or ladies' thistle*, hedge banks, July to August, purple

Onopordum acanthium, *cotton thistle*, road sides, on rubbish, and in cultivated land, July, common

Centaurea calcitrapa, *star thistle*, in dry pastures and by the side of roads, July, not common

Cnicus lanceolatus, *spear thistle*, pastures and road sides, B. July to August, purple. The flowers have the property of curdling milk

palustris, *marsh thistle*, marshes, moist pastures and hedge banks, P. July to August, purple

acaulis, *dwarf thistle*, pastures, July to August, purple. A dwarf plant but spreading the breadth of a foot, the leaves grow close to the ground, and prevent cattle from browsing near them

arvensis, *common thistle*, pastures, corn fields and road sides, July, purple

eriophorus, *woolly headed thistle*, pastures and road sides, August, purple, Matlock bath, &c.

heterophyllus, *melancholy thistle or all-leaf*, moist alpine pastures, July to August, purple, P. Buxton, Taddington, &c. This elegant plant is smoked by the inhabitants instead of Tobacco. It grows among the hay, which is in general cut down before it flowers, the people therefore imagine it never flowers, and call it all-leaf

pratensis, *gentle thistle*, wet meadows, June, purple

Carlina vulgaris, *wild carline thistle*, in dry fields, and on barren sandy soil, May, Middleton dale, common

Bidens tripartita, *trisid leaved water hemp agrimony*, watery places and stagnated waters, A. July to August, yellow, frequent

cernua, *water hemp agrimony*, watery places, September, yellow, Little Eaton brook, and Old Meadows, Derby

Eupatorium cannabinum, *hemp agrimony, Dutch agrimony or common hempweed*, in ditches and marshy ground, July to August, purple, on the banks of the Derwent, by Markeaton brook, and various other places

POLYGAMIA SUPERFLUA.

Conyza squarrosa, *great fleabane or ploughman's spikenard*, dry sandy pastures, July to August, yellow, a troublesome weed and very common

Tanacetum vulgare, *common tansy*, on the borders of fields, and on the side of roads, P. July to August, yellow, in Deadman's lane, and on the banks of the Derwent, in the Old Meadows, near Derby, Horsley castle, &c.

Artemisia Absinthium, *common wormwood*, dry banks and on the road sides, P. August, yellow, Alvaston, Dethick, Mackworth, and in the Old Meadows on the banks of the Derwent, near Derby

vulgaris, *mugwort*, hedges and moist places, P. July, purple

Gnaphalium margaritaceum, *pearl everlasting*, meadows and pastures, August, yellow

dioicum, *cat's foot or mountain cudweed*, meadows and pastures, June to July, rose colour, between Hayfield and Kinder-Scout. *Mr. O. Sims*

rectum, *upright cudweed*, pastures, August, yellowish

uliginosum, *black-headed cudweed*, moist grounds, A. July to August, yellowish, Allestree and Derby

gallicum, *grass-leaved cudweed*, heaths, July to August, yellowish

minimum, *least cudweed*, dry sandy meadows, and among corn, June to July, yellowish

germanicum, *common cudweed*, pastures and road sides, July, Coxbench, Derby and Osmaston

Erigeron canadense, *canada fleabane*, heaths, July to August, yellowish

acris, *blue fleabane*, gravelly pastures, July to August, blue

Tussilago Farfara, *common colt's foot*, frequent on the banks of the Derwent, and in moist situations, P. March to April, yellow, Nutwood at Darley, Breadsall meadow, Darley in the Dale, and Old Meadows, Derby. The leaves are used in the British herb tobacco

Petasites, *pestilent wort, butterbur or colt's foot*, in moist ground near rivers, P. March to April, flesh colour, Duffield, Matlock, and in the Holmes and Old Meadows on the banks of the Derwent, Derby

var. hybrida, *long-stalked colt's foot*, in a moist part of the Old Meadows, between Derby and Spondon

Senecio vulgaris, *common groundsel*, cultivated land, A. April to September, yellow. A strong infusion of the plant vomits. The bruised leaves are a good application to boils

viscosus, *cotton grass or strong scented groundsel*, sandy ground, June to October, yellow

sylvaticus, *bushy groundsel*, in woods and on hedge banks, July, yellow

tenuifolius, *hoary ragwort, with groundsel leaves*, woods, July to August, yellow

Jacobæa, *common ragwort*, dry pastures, P. July, Allestree, Derby and Pinxton. A decoction of the flowers will dye woollen cloth, after it has been boiled in alum water, a beautiful yellow

aquaticus, *water ragwort*, marshes and watery places, P. August, yellow, Derby and Pinxton

saracenicus, *broad-leaved groundsel*, moist meadows, July to August, yellow

Solidago virgaurea, *woundwort or common golden rod*, woods, July to August, yellow, frequent in Matlock vale, from the baths to the village, Dale Abbey and Dethick. This plant is much esteemed for its efficacy in curing the stone and gravel

Inula dysenterica, *elecampane or middle fleabane*, in moist meadows and pastures, P. July to August, yellow, Derby and Pinxton. This plant is said to be a cure for the bloody flux

pulicaria, *small fleabane*, moist meadows and pastures, September, yellow

Bellis perennis, *common daisy*, meadows and pastures, P. March to May, white, it flowers almost the whole year, common

Chrysanthemum Leucanthemum, *greater daisy, ox eye, moon flower or daisy golding*, meadows and pastures, P. May to July, white, Derby, Little Eaton, Middleton dale, and in a field between Breadsall and the Priory. It propagates by the root and extensively by the seed

segetum, *corn marigold*, in arable land on light soil, A. June to October, Allestree, Normanton and Breadsall

Pyrethrum Parthenium, *corn feverfew*, corn fields, August to September, white

inodorum, *chamomile or goldings*, corn fields, A. July to September, white

Matricaria chamomilla, *chamomile or field feverfew*, road sides, farm yards and barren land, on dry gravelly soils, P. May to July, white, well known for its use in medicine

Anthemis nobilis, *sweet scented creeping chamomile*, in moist heaths and pastures, July to August, white

Cotula, *stinking mayweed*, corn fields and by the road sides, A. May to July, white, Derby, Holbrook and Pinxton

arvensis, *corn chamomile*, corn fields, June to July, white, common

Doronicum Pardalianches, *great leopard's bane or wolf's bane*, walls and moist pastures, May, yellow, about the old walls near Haddon hall. *Mrs. Lucy Hardcastle*

Achillæa Ptarmica, *sneezewort or goose tongue*, in moist meadows, P. July to August, white, Coxbench, Duffield and Radbourn
serrata, *germander milfoil*,
Millefolium, *yarrow, milfoil or nose bleed*, pastures and road sides, A. June to August, frequent. Found sometimes with a purple flower, though it has generally a white one.

POLYGAMIA FRUSTRANEA.

Centaurea nigra, *black knapweed*, pastures, P. July to August, purple
Cyanus, *bachelor's buttons, blue bottle, knapweed, hurt sickle or corn flower*, corn fields, A. July to August, blue, Breadsall
Scabiosa, *greater knapweed*, corn fields, P. July, purple, a corn weed, Pleasley
Calcitrapa, *common star thistle*, on rubbish and road sides, B. July to August, deep red. It is a troublesome weed
Jacea, *common knapweed or matfellow*, on the borders of fields, July to August, purple, common.

CLASS 20. GYNANDRIA.—DIANDRIA.

Orchis bifolia, *butterfly orchis*, moist meadows, May to June, white, Matlock bath, and between Ashbourn and Woodheaves, by the road side
pyramidalis, *late flowering pyramidal orchis*, dry pastures, P. June to July, scarlet, Newton wood, and between Matlock and Bonsal, on the high ground
Morio, *meadow orchis*, moist meadows, P. May to June, purple, Crich, Breadsall meadow and between Stanton and Ticknall
mascula, *early orchis*, meadows, May, purple, Crich, Rough Heanor, Horsley and Breadsall meadow, near the Priory
ustulata, *dwarf orchis*, dry pastures, P. May to June, purple, Alfreton, South Normanton, and in a field above the lead mines, at the top of Masson hill, between Matlock bath and Bonsall
militaris, *man orchis*, dry pastures, May, purple, Matlock bath
latifolia, *broad-leaved orchis*, moist meadows, P. May to June, in a small meadow near the cold bath at the Priory, Breadsall
maculata, *spotted orchis*, woods and dry pastures, P. June to July, flesh colour, Duffield, Matlock, Pleasley and Breadsall meadows
conopsea, *red handed aromatic orchis*, meadows and pastures, June, purple, in a field above the plantations and lead mines on Masson hill, Matlock bath and Pleasley
hircina, *(satyrium hircinum) lizard orchis*, Crich, P. *Mr. Coke*
Ophrys muscifera, *fly orchis*, meadows, P. July, purple, Heights of Abraham and Matlock bath
apifera, *bee orchis*, dry pastures, July, purple, Heights of Abraham, Matlock bath
Nidusavis, *tway blade or bird's-nest orchis*, woods, May to June, brown, in the woods near Mr. Arkwright's grounds and Matlock bath
spiralis, *triple ladies' traces*, dry pastures, August to September, white, not common
Listera ovata, *common tway blade*, woods, P. July, green, Markeaton, Mackworth, Matlock and Newton wood
cordata, *least tway blade or heart-leaved ophrys*, woods, yellow, High moor, Peak forest. *Botanist's Guide*
Satyrium viride, *frog satyrian*, pastures, June to July, greenish. In the fields above the plantations and lead mines on Masson hill, Matlock
albidum, *white satyrian*, sunny hills, June, white
Serapias latifolia, *common helleborine or bastard hellebore*, woods, July to August, green, Heights of Abraham, Matlock bath and in a wood near Wheathill
ensifolia, *sword-leaved hellebore*, woods, June, white, in the plantations at Markeaton, near Derby
palustris, *marsh hellebore*, Woodheaves, near Ashbourn, July to August, green.

CLASS 21. MONOECIA.—DIANDRIA.

Lemna minor, *duck's meat*, ponds and standing waters, June
trisulca, *ivy-leaved duck's meat*, in ponds, ditches and stagnated waters, May to June.

TRIANDRIA.

Typha latifolia, *great cat's tail or reed mace*, on the banks of rivers, fish ponds and in moist places, common, July
angustifolia, *lesser reed mace*, clay pits, June to July
Sparganium ramosum, *greater burweed*, pits and banks of rivers, July
simplex, *lesser burweed*, sides of pools
natans, *floating burweed*, ditches

Carex dioica, *small sedge or separate-headed carex*, in boggy ground, May to June
pulicaris, *flea sedge*, marshes and wet meadows, June
stellulata, *little prickly star sedge*, marshy meadows, May to June
curta, *white sedge*, marshes and pools, June
ovalis, *oval spiked sedge*, marshes and pastures, June
remota, *remote sedge*, moist ditch banks, common, May to June
vulpina, *great sedge*, banks of rivers and pits, Makeney, common, P. May to June
paniculata, *panicled sedge*, bogs, frequent, P. June
digitata, *fingered sedge*, woods, May
linosa, *brown sedge*, boggy meadows, June
pendula, *pendulous sedge*, moist woods and hedges, June to July
pallescens, *pale sedge*, moist pastures, May to June
sylvatica, *wood sedge*, woods, common, May to June
distans, *loose sedge*, marshes, June
præcox, *vernal sedge*, dry pastures, April
flava, *yellow sedge or marsh hedge hog grass*, wet meadows about Duffield, P. June
panicea, *pinky sedge*, moors, Breadsall, P. June
recurva, *heath sedge*, moist places on heaths, May to June
riparia, *common sedge*, P. April
stricta, *glaucous sedge*, marshes, April
vescicaria, *bladder sedge*, bogs and pits, May
paludosa, *acute sedge*, moorish ground and wet ditches
hirta, *hairy sedge*, watery meadows, common, May to June
cæspitosa, *turfy sedge or carnation grass*, marshes and old pits, May.

TETRANDRIA.

Buxus sempervirens, *box tree*, gardens, plantations and in very old hedges, not very common, April, yellow, very fine in Bretby gardens
Alnus glutinosa, *alder tree*
Urtica urens, *lesser stinking nettle*, under hedges and amongst rubbish, June to August
dioica, *common stinking nettle*, hedges and amongst rubbish, July to August.

PENTANDRIA.

Bryonia dioica, *red berried briony*, May to September, hedges about Derby and Matlock.

POLYANDRIA.

Myriophyllum spicatum, *spiked water milfoil*, ditches and ponds, July to August, reddish
verticillatum, *verticillated milfoil*, ditches and stagnated waters, July, green
Sagittaria Sagittifolia, *arrow head*, ditches and banks of rivers, in the Trent near Ingleby and Swarkstone bridge, July to August, white
Arum maculatum, *wake robin or cuckoo pint*, hedges, woods and shady places, frequent
Poterium Sanguisorba, *common burnet*, pastures, Matlock, July, green
Quercus Robur, *oak tree*, woods and hedges, very large, Kedleston park and Crich Chase
Fagus castanea, *chesnut tree*, hedges and plantations, very fine, one in Mr. Mouseley's garden, Derby, at Matlock, and in the avenue leading to Bretby hall, May
Sylvatica, *beech tree*, hedges and plantations, May, fine and large at Hopton, and a very extraordinary one in Bretby park, 15 feet in circumference, and the branches extend 17 yards from the trunk each way
Betula alba, *birch tree*, hedges and plantations, April to May, not very common. Birch wine is a good beverage
Carpinus Betulus, *horn beam*, hedges and plantations, common, May
Corylus Avellana, *hazel nut tree*, hedges and plantations, frequent, Via Gellia and Dovedale
Pinus sylvestris, *Scotch fir*, plantations, May.

POLYGAMIA.

Acer campestre, *common maple tree*, in hedges, almost every where, May to June
pseudo platanus, *greater maple tree*, found in hedges near houses, May to June.

CLASS 22. DIOECIA.—DIANDRIA.

Salix pentandra, *sweet willow*, woods and hedges, May to June
cinerea, *grey willow*, woods, May
aurita, *round-eared willow*, woods, April to May
repens, *creeping dwarf willow*, on heaths and hilly ground, May
caprea, *common round-leaved sallow withy*, hedge rows, pits and woods, April to May
acuminata, *long-leaved sallow*, moist places, April
viminalis, *osier*, willow beds, near rivers, very common, April
alba, *white willow*, woods and hedges, chiefly in moist places, very common, April.

TRIANDRIA.

Empetrum nigrum, *black berried heath, crake berries or crow berries*, East Moor.

TETRANDRIA.

Viscum album, *misletoe*, on trees, particularly the oak, apple, pear, lime, willow, elm, &c. May, greenish. Much esteemed by the ancients, and still continues to be in request at Christmas to decorate houses and churches, at which season many a blushing maid receives a salute under the misletoe bush, Millford

Myrica Gale, *sweet gale, sweet willow, or Dutch myrtle*, moist heaths and marshy ground.

PENTANDRIA.

Humulus Lupulus, *hops*, in moist hedges near villages, July, yellow, in hedges on the Kedleston road, and near Little Eaton, Wilne, Killamarsh, Belper, Cresswell, Duffield, Marston, Montgomery, Walton on Trent, Mercaston, Pinxton, Roston, and by the canal side and Old Meadows, Derby. *Glover.*

HEXANDRIA.

Tamus communis, *black briony*, under hedges and bushes, June, greenish, frequent, Matlock.

OCTANDRIA.

Populus alba, *white poplar or abele tree*, common in moist boggy situations, March
tremula, *aspen or trembling poplar*, in moist woods, frequent, March
nigra, *black poplar*, in moist woods and sides of rivers, common, March.

ENNEANDRIA.

Mercurialis perennis, *dog's mercury*, woods and moist ditch banks, common, hedges on the Duffield road, April to May, green
annua, *French mercury*, on rubbish, and often on cultivated land, July to September, green.

MONADELPHIA.

Taxus baccata, *yew tree*, fissures of rocks at Matlock, March to April, very large in Allestree, Darley in the Dale, and Duffield church yards.

CLASS 23. POLYGAMIA.—MONOECIA.

Atriplex patula, *spreading narrow-leaved orache*, on rubbish and ditch banks, A. August
hastata, *wild orache or fat hen*, on rubbish and in kitchen gardens, August to September
angustifolia, *narrow-leaved orache.*

CLASS 24. CRYPTOGAMIA.—FILICES.

Equisetum sylvaticum, *wood horsetail*, ditches and woods, in shady moist places, April
arvense, *corn horsetail*, on arable land, in moist situations, March
palustre, *marsh horsetail*, marshes, June to July
fluviatile, *river horsetail*, moist woods, rivers and pools, Newton wood
limosum, *smooth naked horsetail*, shallow waters
hyemale, *shave grass*, marshes

Lycopodium clavatum, *club moss*, bogs on East moor
selaginoides, *prickly club moss*, moist heaths, August
inundatum, *marsh club moss*, bogs, June to July, Chinley hill. *Botanist's Guide*
selago, *fir club moss*, bogs on East moor
alpinum, *mountain or savin-leaved club moss*, on the mountains near the Derwent

Polypodium vulgare, *common polypody*, walls and roots of trees, frequent
dryoptera, *lesser branched polypody*, shady woods and on walls, rare, Chinley hill
calcareum, *rigid three-branched polypody*, woods opposite the new bath, Matlock, and Middleton dale. *Mr. Knowlton*

Aspidium Filix mas, *male fern or polypody*, woods and hedges, common, May to June
aculeatum, *prickly shield fern or female polypody*, on banks and the shady side of ditches, June

Aspidium dumetorum, *berried fern*, among bushes under the high rocks at the top of Cromford, near the Matlock bath. *Smith's Fl.*
Filix fœmina, *female polypody*, common at Wingerworth, shady woods, June
Oreopteris, *heath shield fern*, dry wastes, June to July
cristatum, *brittle polypody or great branched fern, with indented leaves*, in woods and moist shady places
dilatatum, *great crested fern*, moist woods, June to July
Asplenium Trichomanes, *maiden hair*, old walls and clefts of rocks, at Dovedale and Matlock, June to July
viride, *green maiden hair*, Coxbench wood
Ruta muraria, *wall rue or white maiden hair*, moist walls and rocks at Quarndon and Matlock, July
Adiantum nigrum, *black maiden hair*, rocks and old walls, and in shady lanes
Scolopendrium vulgare, *spleenwort*, fissures of rocks at Littleover and Matlock
Blechnum boreale, *rough spleenwort*, in moist woody places and hedge banks, July
Pteris aquilina, *common fern or brakes*, on heaths, August. Burnt to make ash balls
cripa, *curled stone fern*, Chinley hill. *Botanist's Guide*
Ophioglossum vulgatum, *adder's tongue*, meadows, Dethick and Shottle, May. *Mr. Coke*
Botrychium Lunaria, *moonwort*, woods, Dethick, Corbar and Buxton. *Mr. Coke*
Osmunda regalis, *water flowering fern or osmund royal*, woods and moist boggy places, very rare, July to August
Cyathea fragilis, *brittle cup fern*, Matlock
regia, *laciniated cup fern*, limestone rocks. *Mr. Knowlton.*

MUSCI.

Phascum subulatum, *subulated earth moss*, ant hills, on wet clayey soil
Hypnum complanatum, *flat feather moss*, trunks of trees
trichomanoides, *feather moss*, roots of trees
purum, *neat feather moss*, wet meadows and dry shady banks
lutescens, *glistening moss*
serpens, *creeping feather moss*, ground, sticks and stones
proliferum, *opaque proliferus or fern feather moss*, woods, frequent, Matlock
ruscifolium, *knee holly-leaved feather moss*, stones in rivulets
triquetrum, *triangular feather moss*, woods, frequent
filicinum, *bog feather moss*, wet moors and boggy ditches
cupressiforme, *cypress feather moss*, woods, at the roots of trees
Teesdalii, *teesdalian feather moss*, in woods on the south-east side of the river at Matlock, near Teesdale. *Smith's Fl.*
recognitum, *lesser opaque feather moss*, Matlock. *Smith's Fl.*
Funaria hygrometrica, *yellow bulbed marsh moss*, on stones on the ground
Bartramia fontana, *fountain marsh moss*, mountainous commons
tortula subulata, *twisted knotty moss*
mucoronulata, *spiked moss*
Dicranum glaucum, *bristle marsh moss*, moors
taxifolium, *yew-leaved moss*
heteromallum, *hair pencil mucum*,
scoparium, *broom marsh moss*, hedge banks
pellucidum, *transparent moss*
Sphagnum obtusifolium, *blunt-leaved moss*
acutifolium, *sharp-leaved moss*
latifolium, *broad-leaved bog moss*,
Polytrichum commune, *besom moss or goldilocks*, woods and boggy ground
juniperinum, *juniper moss*
undulatum, *waving moss*
subrotundum, *dwarf hair moss*,
aloides, *aloe-leaved hair moss*, rocky banks
Alnium palustre, *common marsh moss*, bogs and wet heaths
Trichostomum fontinaloides, *river fringe moss*, B. in the river at Matlock bath
Didymodon flexifolium, *bending-leaved moss*
Bryum nutans, *silky pendulous thread moss*, Cromford moor. *Smith's Fl.*

ALGÆ.

Jungermannia pulcherrima, *cochleariforme*, near Hathersage
epiphylla, *broad-leaved star-tip*, wet rocks
bidentata, *clover star-tip*, moist rocks and ditch banks
sphœrocephala, *powdered star-tip*, wet rocks
complanata, *flat star-tip*, trunks of trees, frequent
resupinata, *curled star-tip*, wet rocks
dilatata, *scaly star-tip*, trunks of trees
Marchantia polymorpha, *stone liverwort*, sides of wells and rivulets
conica, *conic livergreen*,
Lichen botryoides, *clustered lichen*
incanus, *powdery lichen*, hedge banks and trunks of trees
physodes, *inflated lichen*, trunks of birch trees
parietinus, *yellow wall lichen*, walls and trees, frequent
pyxidatus, *cup lichen*, hedge banks and heaths
deformis, *mishapen lichen*
cocciferus, *scarlet cupped lichen*, heaths
rangiferinus, *reindeer lichen*, bogs, Breadsall moor
uncialis, *short lichen*, heaths
hirtus, *rough lichen*, trees and posts
farinaceus, *mealy lichen*, apple and sloe trees
fraxinus, *wrinkled lichen*, trunks of timber trees
fastigiatus, *high pointed lichen*
perlatus, *broad lichen*
caninus, *grey ground liverwort*, hedge banks and woods. Recommended by Dr. Mead to prevent madness, after the bite of a mad dog
sulphureus, *sulphur-coloured lichen*, walls
scriptus, *lettered lichen*, trunks of young trees
canescens, *hoary lichen*, trunks of aged trees and walls
ater, *black-cupped lichen*, walls and trees, frequent
concentricus, *concentric lichen*,
niger, *black lichen*, limestone
cornicopioides, *radiated lichen*, Breadsall moor
fusco ater, *black-knobbed lichen*, on the bark of young pear trees
fagineus, *white lichen*, bark of beech and other trees
immersus, *sunk lichen*, walls
pertusus, *porous lichen*, bark of trees and walls
coccineus, *scarlet lichen*, walls
parellus, *crab's-eye lichen*, rocks, walls and trunks of trees
scruposus, *hollowed lichen*, walls
atrocinereus, *grey-bordered lichen*, walls
subfuscus, *brownish lichen*, walls and barks of trees
pallescens, *pale lichen*, walls and trunks of trees
psora, *scabby lichen*, on stones
candelarius, *yellow lichen*, rocks, pales, trunks of trees, and on a wall near Coxbench
stellarius, *starry lichen*, bark of trees, near Coxbench
olivaceus, *olive-coloured lichen*, trunks of apple and sycamore trees
cornutus, *horned lichen*, heaths, frequent on Breadsall moor
digitatus, *branched scarlet-headed lichen*, moist heaths and roots
plicatus, *stringy lichen*, oak trees
floridus, *flowering lichen*, on a wall between Derby and Coxbench
prunastri, *ragged hoary lichen*, old plum trees and old pales
ciliaris, *hairy lichen*, apple and elm trees
tenellus, *slender lichen*, apple trees
caperatus, *rose lichen*, trees, pales and stones, Coxbench. It is used to dye woollen of an orange colour
lactæus, *milky lichen*, frequent

FUNGI.

Agaricus campestris, *common mushroom*, dry meadows and pastures

Agaricus Cantharellus, *yellow champignon*
deliciosus, *saffron-juiced agaric*, fir plantations, very rare
orcades, *fairy-ring agaric*,* upland pastures
giganteus, *great agaric*, [four to fourteen inches diameter]
terreus, *dirt-coloured agaric*, meadows and woods
dentatus, *orange agaric*, meadows, pastures, parks and forests
integer, *crimson agaric*, pastures, common
caseus, *cream-cheese agaric*, groves
procerus, *tall agaric*, hedge banks and dry pastures
muscarius, *fly agaric*, borders of pools
Listeri, *bitter agaric*
necator, *deadly agaric*, borders of pools
piperatus, *pepper agaric*, fir plantations
latus, *broad agaric*, borders of pools
floccosus, *shag agaric*, woods
fascicularis, *clustered agaric*, near decayed timber, in clusters, very frequent
cumulatus, *crowded agaric*, hedge banks, frequent
cineacreus, *ash-coloured agaric*, dunghills and meadows
ovatus, *egg agaric*, hedge banks and woods
semi-ovatus, *half egg-shaped agaric*, dunghills and pastures
semi-globatus, *hemispherical agaric*, pastures, frequent
plicatilis, *plaited agaric*, decayed roots
campanulatus, *bell agaric*, woods and pastures, common
varius, *variable agaric*, roots of trees
stercoreus, *stinking agaric*, cow pastures
æruginosus, *verdigris agaric*, in groves
araneosus, *cobweb agaric*, plantations
clypeatus, *long-stalked agaric*, plantations
cæspitosus, *turf-springing agaric*, side of pools
castaneus, *chesnut agaric*, plantations
calyciformis, *cup-shaped agaric*, groves
eburneus, *ivory agaric*, pastures, common
fulvus, *tawny agaric*, pastures
farinaceus, *mealy agaric*, parks
fusco-flavus, *yellowish brown-coloured agaric*, parks
lacer, *lacerated agaric*
livido-purpureus, *bluish or purple-coloured agaric*, wet ground, near pools
nemoralis, *wood agaric*, moist woods and coppices
subcærulus, *azure-coloured agaric*, fir plantations
violaceus, *violet agaric*, groves
ardosiaceus, *black-stalked agaric*, birch plantations
velutipes, *velvet-stalked agaric*, foot of decayed posts, in clusters
lateralis, *short-stalked agaric*, decayed trees and posts
quercinus, *stemless oak agaric*, decayed trees and posts, common
Boletus flavus, *yellow boletus*
aurantiacus, *orange boletus*, frequent
squamosus, *honey-comb boletus*, trunks of ash trees
versicolor, *striped boletus*, trunks of decayed trees and posts
igniarius, *touchwood boletus*, trunks of cherry trees
Helvella mitra, *mitre mushroom*
Peziza cochleata, *wreathed peziza*, birch plantations
coccinea, *the shelly peziza*
Phallus impudicus, *stinking morel*, shady hedge banks
Clavaria Hypoxylon, *horned club top*, rotten sticks, common
ophioglossoides, *black club top*, road sides
pistillaris, *hollow club top*
muscoides, *yellow pointed club top*
Lycoperdon Bovista, *great puff-ball*, drained peaty ground

* It must needs afford unspeakable satisfaction to the inquisitive mind, that all the doubts and uncertainty which, after the most diligent investigation, for a long time perplexed the naturalist, concerning the origin of *fairy rings*, are at length dispelled. This curious phænomenon, so much the object of superstition in the days of our forefathers, and which by some eminent modern philosophers have been attributed to the effect of lightning, is now indubitably proved to be caused by fungi, the spawn of which is destructive to *grass* and *herbage*, in general.

Any one who shall attend to the spot where incipient bare or brown *rings* are first visible, may satisfy himself of the truth of this opinion, by examining the soil at the depth of two or three inches: he will find it replete with these fungi, in miniature. They appear in the form of a whitish powder, and are a curious object for the microscope.

The formation of *fairy rings* are not confined to this species. The A. Giganteus, A. Terreus and others, are capable of producing the same effects. *See Gentleman's Magazine for December*, 1791, *page* 1085.

Lycoperdon equinum, *horse puff-ball*
stellatum, *star puff-ball*, hedge banks
Sphæria scripta, *lettered sphæria*, on the trunks of trees
tremelloides, *red-knobbed sphæria*, rotten sticks
tuberculosa, *knobbed sphæria*, dried hazel sticks.

> ——————There lives and works
> A soul in all things, and that soul is God;
> He marks the bounds which winter may not pass,
> And blunts his pointed fury; in its case,
> Russet and rude, folds up the tender germe
> Uninjured, with inimitable art;
> And ere one flowery season fades and dies,
> Designs the blooming wonders of the next. *Cowper.*

A SKETCH OF THE ZOOLOGY OF DERBYSHIRE.

CLASS 1. QUADRUPEDS.

Division 1. Hooped.

The Horse, *Equus Caballus.*—Tail and mane, with long hair, ears short, erect, colour various, viz. chestnut, bay, grey, white, black, brown, &c.

Of all the animals which man has subjugated to his purposes, the horse is the most noble and most useful. The breeds of this noble animal were different half a century ago in this county to what they are at the present time. At that period a small and light description of horses was bred in the northern part of the county for the purposes of carrying limestone, lead ore, calamine, and coal to distant places, through roads almost impassable by wheel carriages, and their agility in ascending and descending the steep mountains, with heavy burdens on their backs, was remarkable. Since the roads that intersect the county in every part, and more particularly in the mountainous district, (where the materials for road-making are so excellent) have been so universally improved, a more easy way of conveying such heavy materials has been adopted, by the use of one-horse carts and other wheel carriages. In the southern part of the county, and the Hundred of Scarsdale, the breed of horses were formerly of the heavier kind; furnishing the London market with excellent dray horses. Since the establishment of a cavalry force in this county, the yeomen have been induced to put their heavy brood mares to thorough-bred horses, to produce animals useful for the purposes of the saddle as well as for agriculture; by this means a race of animals have been produced, combining activity with strength, suitable for the husbandman, the carriage, the road and the field. The sort generally preferred for draught is the heavy black breed, having the greatest weight and strength; but some of the brown and other colours, have doubtless more action and energy of motion, and are to be preferred in all cases where despatch is more the object than strength. Horses that are accustomed to the hills, which are used for the saddle, when pursuing the hounds, will run full speed along the side of a precipice, or directly down the steepest declivities. It is said that those which have been long used to the country, will ascend any precipice that can be climbed by man. For size and beauty, the English horses are superior to those of every other country, and are capable of performing what no others ever could attain to. By a judicious mixture of the several kinds, and by our superior management, they excel the Arabian in size and swiftness, are more durable than the Barb, and more hardy than the Persian. An ordinary racer will go at the rate of a mile in two minutes, and we had one instance in the famous Childers, of much greater rapidity; he having frequently been known to move above eighty-two feet and a half in a second, or almost a mile in one minute; and he has run round the course at Newmarket, which is little less than four miles, in six minutes and forty seconds.

Sir Henry Harpur at one time kept a valuable stud of race horses at Swarkstone-Lows; amongst the most celebrated, we may notice Jason, Furyband, Pilot, Juniper, (which we are informed won ten gold cups, and was never beaten) Dairymaid, Trueblue, Young Goldfinder, &c. Though we cannot now boast of any superior breed of race horses being kept in this county, several noblemen and gentlemen have valuable hunters and carriage horses. The Duke of Devonshire has given every encouragement to his tenantry to induce them to improve the breed of their horses, by keeping thorough-bred stallions for them at Chatsworth.

The following gentlemen have recently obtained the Agricultural Societies' prizes, for having the best stallions, brood mares, and stock of their kinds. Thorough bred stallion, Mr. Stacye; cart-kind, Mr. Ward; brood mares and stock, Mr. Sampson, Mr. Reid Denham, Mr. Royston, Mr. Hardwick, &c.

The Ass, *Equus Asinus.*—Ears long, flaccid, a black cross on the top of the shoulders; generally of a brown and dark brown colour.

This animal, says a modern writer, finds its value in the revolutions of time, being now

kept by many respectable families for the use of young ladies and gentlemen. Several of these useful creatures are used in this county for various purposes; some in the mines, others to carry milk, earthenware, coals, &c. Were the race of horses to cease to exist, that of the serviceable, but too frequently ill-used ass, would soon acquire no trifling value. When well kept he is a handsome animal, stronger in proportion and more hardy than the horse, and has the additional advantages, of being less subject to disease, and capable of living upon very humble fare. It is only in the article of water that he can be said to be dainty, of that he will drink only the clearest. His stupidity is too often caused by ill-usage. He is four years in coming to perfection, and lives from twenty to thirty years; he seldom lies down to sleep unless greatly fatigued.

THE OX, *Bos Taurus.*—The neat cattle of this county are principally of the improved short-horned kind, and rather large and handsome; the cows have the property of becoming fat in a short time; their size is various, weighing from nine to twelve score the quarter. As the dairy is of the greatest importance to many of the Derbyshire farmers, the quantity and quality of milk is also attended to. It has been questioned whether the original long-horned, for the which the late Mr. Princep of Croxall, and the late Eusebius Horton, esq. of Catton, were so famous, or the present improved short-horned, produced by W. B. Thomas, esq. of High Fields, and William Smith, esq. of Swarkstone-Lows and Dishley, have the advantage in this respect; the latter for their beautiful symmetry and other good qualities, have now the decided preference in this county. Great praise is due to several noblemen and gentlemen of the county; some for the considerable pains they have taken, and the serious expenses incurred to improve the breed of stock; and others for the encouragement and interest they have taken, and the desire they have had to behold on their estates, kine equal, if not superior, to any in the kingdom. The desired object has been attained, as will be more particularly seen from the portraits of stock, given in the chapter on agriculture; and it may be justly questioned whether any other district in England, of the same extent, can furnish so large a number of cows, equally distinguished for their beautiful symmetry and other qualities. In proof of their superiority, they have obtained the prizes at the Smithfield cattle shows; and of their great value and excellence, some idea may be formed from the prices obtained for them by the different breeders, viz. Mr. Thomas's heifer, Daffodil, when twenty-one months old, sold for 60 guineas, as a show beast; and his celebrated bull, called Charles the second, obtained the prize, given by the board of agriculture, in 1821; at Mr. Smith's stock sales, his cows have sold as high as 150 guineas, heifers 100 and upwards.

Besides the two spirited gentlemen already named, we may insert amongst the first-rate breeders, the Earl of Chesterfield; Sir George Crewe, bart.; Sir George Sitwell, bart.; Rev. Richard Whinfield, of Heanor; Rev. C. H. R. Rodes; Abraham Hoskins, esq.; Samuel Rowland, esq. Derby; Mr. Turner; Mr. Heywood of Brimington; William Jessop, esq. of Butterley hall, &c. Mr. Wilson of Stenson still has a herd of pure long-horned neat cattle, which he has bred from the celebrated stock of the late Mr. Horton of Catton.

The short-horned breed are of various colours, size and weight; large, producing well to the pail, and weighing when full grown and fat, the cows ten to twelve score the quarter, and the oxen twelve to fifteen score; they are well-formed, disposed to fatten, and handle sleek and well, with great weight in the more valuable joints, and the cows are of singular and beautiful appearance. The cow has seldom more than one calf at a time, and goes about nine months. There is scarcely a part of this animal that is not useful to mankind; and of late years, benefit has been derived even from one of its diseases, by the introduction of vaccine inoculation, an antidote for that horrible and deadly disorder the small pox. The Derby fortnightly Smithfield market is generally well supplied with fat stock, and is of great utility to the grazier, and of some benefit to the butcher. Though a large number of cattle is annually bred in this county, it is supposed that they are not sufficient for the use of the inhabitants. Many are brought every year from Ireland, Scotland, Lancashire and Yorkshire, and sold to the Derbyshire graziers. Many Kyloe oxen enjoy the sweet herbage of our meadows. This is a Scotch breed of cattle, chiefly of a black colour, with thick hides, much silky hair, and large horns. They fatten well, and often attain to a great size.

THE WOODLAND SHEEP, *Ovis Aries.*—Horns compressed, rough and hollow, simple, spiral, turning outwards; face grey or black, legs of the same colour, wool short and fine: Woodland sheep improve in pasture. Large flocks of these are kept in the Woodlands and on the Moors.

THE NEW LEICESTERSHIRE SHEEP.—Face and legs white, wool longer, but fine in staple, hornless, fine in bone, thick, compact, inclined to fatten, quiet in pasture.

THE MERINO OR ANDALUSIA SHEEP.—Looser and lighter made, longer and less compact, twirling horns, wool silky, extremely fine. Spanish sheep.

Sheep on the northern and southern part of this county are very different. Those on the Leicestershire border resemble the sheep of that county for weight, size, and fleece; the carcass, when full grown and fat, weighs from 25 to 40 lbs. per quarter; some have been slaughtered from Mr. Smith's flock, of Swarkstone-Lows and Dishley, weighing 62 lbs. the quarter. In the centre, to the north-east and west of the county, they are somewhat smaller. In the High Peak they weigh from 14 to 20 lbs. per quarter, those fed on the gritstone land being

about 3 lbs. lighter than those pastured on the limestone tracts. The fleece of the former are also much lighter and thinner than the others. This difference in the quantity and quality of the wool may be owing to the quality of the food, or to the particular breed of the animal. The large flocks of the two latter kinds of sheep, that range the mountains and extensive tracts of moorland in the High Peak hundred, constitute the principal riches of the farmers in the northern extremity of the county, and furnish the Manchester and Sheffield markets with the best of mutton. At five years old they are considered to be at their prime. Mr. Hutchinson, in his tour, gives us a long story about the attachment of the Woodland sheep to their native pastures. He says, one found its way back after having been driven beyond the city of London. No country produces finer sheep, with larger fleeces, or better adapted for the business of the clothier, than England. Those of Spain have confessedly finer fleeces, and we generally require some of their wool to work up with our own; but the weight of a Spanish fleece is much inferior to one of Derbyshire, Leicestershire, or Lincolnshire. The Spanish or Merino breed has been introduced into this county, and the fleece is found to retain its primitive fineness. The most celebrated amongst the breeders in Derbyshire are William Smith, esq. of Swarkstone-Lows and Dishley; Thomas Hassal, esq. of Hartshorn; W. B. Thomas, esq. of High Fields; Mr. Samuel Beardsley, of Kirk Ireton; Mr. Birkett, Mr. Webster, &c.

Sir George Crewe, bart. for several years kept a flock of south downs, he has now changed them for the Portland sheep, which answer well; and what is remarkable, I am told they will breed twice a year; several of these ewes were suckling their lambs when I visited Calke park, on the 22nd of January, 1829. *S. Glover.*

The Goat, *Caper Hircus.*—Horns hollow, erect, bending backwards, body covered with long hair, and long beard; domesticated.

The few goats kept in Derbyshire now, are principally to be found in the stable-yards of noblemen, gentlemen, and coach proprietors, where a number of horses are kept; though they were formerly as much attended to as any of the animals which have been mentioned. Among the endowments of Beauchief abbey, recited in a charter of Henry the Fourth, we find a grant of pasture land for forty cows and two bulls, ten mares, eighty sheep, thirty swine and forty goats. From so large a proportion of goats, it may be presumed, that they were very numerous in this part of the kingdom. The goat is naturally possessed of more instinct than sheep, and is stronger, swifter and more courageous. Lively, playful and capricious, it does not easily submit to be confined, but chooses its own pastures, delights in climbing precipices or the heathy mountain, and the shrubby rock is more suited to its taste than the cultivated field; its favourite food consists of the tops of boughs, or the tender bark of young trees. It leaps with the utmost ease and security amongst the most frightful crags. Nature has in some measure fitted it for traversing these declivities; the hoof being hollow underneath, with sharp edges, so that it could walk securely on the ridge of a house. Sensible of kindness and caresses, the goat easily attaches itself to man, and being an hardy animal, and easily sustained, it is in the mountainous districts chiefly the property of the indigent. In the highlands of Scotland, these animals constitute the chief riches of the hardy natives, and supply them with the few indulgences their situation permits them to enjoy. The milk of the goat is sweet, nourishing and medicinal; this the highlanders eat with oaten bread, and convert a part of it into butter and cheese; and the skins, which are soft, clean and wholesome, form their beds.

The Stag, Red Deer or Hart, *Cervus Elaphus.*—Horns round, branched, and turned backwards. A few are kept in parks; but their ferocity in the rutting-season has caused their numbers to be reduced.

This animal is formed to embellish the forest and animate the solitude of nature. His graceful make, his airy motion, and the ample branched horns that adorn his head, added to his size, strength and swiftness, render him one of the most elegant, if not one of the most useful of quadrupeds. This species of animal, now almost, if not quite extinct in this county, at one period inhabited the Peak forest, and an extensive tract of land (formerly well wooded) in great numbers. This forest was anciently called *De alto Pecco*, and included the parishes of Castleton, Chapel or Boden, Glossop and Hope in this county; and Mottram in Langdon dale, in the county of Cheshire. It was stocked with *red deer*, which by tradition are reported to have sometimes traversed the country so low as Ashford-in-the-Water. Most of the deer perished in a great snow about the time of James the First, and the latter part of the reign of Queen Elizabeth. Many petrified horns have been found in the limestone tracts. The fine branching horns of this animal still ornament the halls of our ancient nobility and gentry, which may be considered a further proof that stags were once common in this county.

The Fallow Deer, *Cervus Dama.*—Horns compressed, branched, turned backwards, and broad at the extremities.

In the noblemen and gentlemen's parks in this county, there are two varieties of the Fallow Deer; the beautiful spotted kind, originally brought from Bengal, and the deep brown sort, introduced from Norway by James the First. In form and disposition they resemble the stag, but are smaller, less robust, and instead of branched and round, have broad and palmated

horns. The term of their life is about twenty years, and they arrive at perfection in three. They browse closer than the stag, and will feed on many vegetables which he rejects, but they are prejudicial amongst young trees, which they frequently strip too close for recovery. The wish to possess some favourite spot often causes a herd of these animals to divide into two parties, and engage each other with equal ardour and obstinacy. On such occasions, the combatants are led by the oldest and strongest deer of the flock; they attack with perfect order, fight with courage, retire or rally as circumstances may require, and even renew the combat for several days; until at length, the weaker party is compelled to relinquish the object for which it has been contending.

The most numerous herds of deer in this county are to be found in the following noblemen and gentlemen's parks, viz. Alderwasley, Francis Hurt, esq.; Alfreton, William Palmer Morewood, esq.; Bretby, the Earl of Chesterfield; Chatsworth, the Duke of Devonshire; Calke, Sir George Crewe, bart.; Drakelow, Sir Roger Gresley, bart.; Hardwick, the Duke of Devonshire; Kedleston, Lord Scarsdale; Locko, Mrs. Lowe; Sudbury, Lord Vernon; Sutton, Richard Arkwright, esq.; Wingerworth, Sir John Henry Hunloke, bart.; Norton, Samuel Shore, esq.; Stanton, Bache Thornhill, esq.

THE HOG, *Sus Scrofa.*—Hoof divided, two tusks in each jaw, ridge of the back beset with strong bristles. The dividing of the hoof was formerly considered as an essential character, but a variety has been lately produced with the hoof undivided, having otherwise the same specific character.

The species that belong to the hog tribe, combine the various characteristics of several tribes of animals. They resemble the horse in the number of their teeth, the length of their head, and having but a single stomach; and the cow kind in their cloven hoofs and the position of their intestines; but in their appetite for flesh, their numerous progeny, and their not chewing the cud, they resemble those of the claw-footed kind. Thus they fill up that chasm which is found between the carnivorous and graminivorous kinds; being possessed of the ravenous appetite of the one and the inoffensive nature of the other. In their wild state they offend no other animal of the forest, at the same time they are furnished with arms to terrify the bravest. The wild boar, which is the original of all the varieties, is neither so stupid nor so filthy as that which we have reduced to tameness. It appears, that in the reign of king John, these animals were inhabitants of Derbyshire; for at that time a grant was made to the monastery of Lenton, of tithe of the game taken in the counties of Derby and Nottingham, viz. of stags and hinds, of bucks and does, and of boars and sows. *Mon. Angl.* Vol. I. page 648.

The chase of the wild boar was one of the diversions of our ancient nobility and gentry, and it constitutes one of the principal amusements of the higher ranks in those countries where it is found. This species of hunting is attended with danger, as his tusks are formidable, and he frequently uses them against his pursuers with terrible effect. The natural term of a hog's life is little known, and the reason is plain—because it is neither profitable nor convenient to keep that turbulent animal to the full extent of its time.

*The Sow** subsists principally upon roots, acorns, grass, vegetables, whey, grains, meal, and other provisions. It has been known to attack infants, and if it happens to meet with a dead and even putrescent carcass, it immediately seizes upon it. It is indeed sordid, stupid, filthy and brutal in its nature, and appears to make choice only of what other animals find the most offensive. When supplied with sufficient food it becomes inactive and drowsy, and its life is a round of sleep and gluttony, till its flesh is a greater load than its legs are able to support: and it continues to feed, lying down or kneeling, an helpless instance of indulged sensuality. It is, as well as the male, capable of being taught many things, is attached to its companions, and will hasten to the assistance of any of its kind, as soon as it hears them utter the cry of distress. It has been trained like a pointer, and displayed equal sagacity in finding game. Wind appears to have a great influence on this quadruped; for when it blows it appears agitated, and runs screaming to its sty. Sows go with young about four months, and produce six, eight, and often twelve in a litter; their young, when about a month old, are handsome and lively little creatures, and their anticks are very amusing. At six weeks old they are frequently slaughtered, and furnish the table with a luxury too rich for weak stomachs.

It would be a difficult task to describe the varieties of this valuable animal, which are bred and fed in this county; Pilkington, nearly forty years ago, says, there were at that time three

* The Rev. Gilbert White, in his Natural History of Selborne, says, a neighbour of his kept a half-bred Bantam sow, who was as thick as she was long, and whose belly swept on the ground, till she was advanced to her seventeenth year; at which period she showed some tokens of age, by the decay of her teeth, and the decline of her fertility. For about ten years this prolific mother produced two litters a year, of about ten at a litter, and once twenty at a litter; but as there were near double the number of pigs to that of teats, many died. From long experience in the world, this female was grown very sagacious and artful: when she found occasion to converse with a boar, she used to open all the intervening gates, and march, by herself, up to a distant farm, where one was kept; and when her purpose was served, would return by the same means. At the age of about fifteen her litters began to be reduced to four or five, and such a litter she exhibited when in her fatting pen. She proved when fat, good bacon, juicy and tender; the rind or sword was remarkably thin. At a moderate computation, she was allowed to have been the fruitful parent of three hundred pigs; a prodigious instance of fecundity in so large a quadruped.

different sorts of swine in the county, viz. some very large, weighing from forty to fifty stone, with very long heads, and large ears hanging over their eyes, and extending almost to their nose, giving them a disagreeable appearance. A smaller sort, with short ears pointing upwards. But the most common were a mixture of the two, weighing about twenty-five stone each. Since that period, great attention has been paid to improve the breed of this animal, and several of the noblemen and gentlemen of the county have introduced breeds from China, France, and other countries. Sir George Crewe, bart.; Sir George Sitwell, bart.; Rev. C. H. R. Rodes; Mr. Heywood, of Brimington; Mr. Thomas, of High Fields; Mr. Greaves, of Bakewell; and others, have been competitors for the prizes offered by the Agricultural Society for the best breed. In 1827, Mr. Heywood obtained the Societies' prize; and in 1828, Mr. Greaves of Bakewell had it awarded to him, for producing to the Society the pure Neapolitan breed. We have seen Mr. Greaves's farm-yard, and his breed of pigs; for symmetry, they are not to be excelled; their characteristics are striking; they are black, with no hair on their bodies, and have short ears, pointing upwards; they are light in the bone, and Mr. Greaves informs us, they are more hardy than any other race of pigs, as they will do well on the most common food.—The boar appeared to be very ferocious.

Division 2. Digitated Quadrupeds.

The Dog, *Canis Familiaris.*—Bends his tail to the left, varieties many, as bloodhound, mastiff, Newfoundland, bull, shepherd, coach, greyhound, fox hound, beagle, terrier, Spanish pointer, English setter, springer, spaniel, water spaniel, shock, lap, cur, &c. All these varieties we have noticed in this county; we shall therefore endeavour to give a short description of some of the principal, and notice a few gentlemen who are celebrated for having a superior breed of some particular sort of these animals.

A modern Author, who has written on Natural History, says, of all carnivorous quadrupeds, the dog-kind must indisputably claim the preference: being the most intelligent, courageous, docile and domestic attendant on man. Always assiduous in serving his master, constant in his affections, friendly without interest, and much more mindful of benefits than injuries offered; he is not alienated by unkindness, but even licks the hand that has been just lifted to strike him, and eventually disarms resentment by submissive perseverance. Dogs have six cutting teeth in each jaw; four canine teeth, one on each side, above and below, and six or seven grinders. Their claws have no sheath, as those of the cat tribe, but continue to the point of each toe, without the power of being protruded or retracted. The nose is longer than in the cat kind, and the body is in proportion more strongly made, and covered with hair instead of fur.

The Bloodhound is well-formed, of a reddish brown colour, and was in high esteem among our ancestors. His employment was to recover any game that had escaped wounded from the hunter, or had been stolen out of the forest; but he was still more serviceable in hunting thieves and robbers by their footsteps. For the latter purpose they are now almost disused.

The Mastiff is peculiar to our own country, and is commonly used in this county as a watch dog. It is nearly the size of the Newfoundland, strong, active, and possessed of great sagacity. The Mastiff, it is said, seldom uses violence against intruders, unless resisted, and even then he will only throw down the person, and hold him for hours without doing him further injury till he is relieved.

The Newfoundland Dog came originally from the island whence it derives its name; it has a pleasing countenance, is very docile, and of great size and sagacity. The feet of this dog are more palmated than usual; which enables it to swim fast, dive easily, and to bring up any thing from the bottom of the water. It is, indeed, almost as fond of the water as if it were an amphibious animal. It is so sagacious, and so prompt in lending assistance, that numbers of persons, on the point of being drowned, have been rescued from a watery grave by its exertions; this circumstance, together with its uniform good temper, has justly rendered it a universal favourite.

The Bull Dog, though less in size than the Mastiff, is nearly equal to him in strength, and superior to him in fierceness. No natural antipathy can exceed that of this animal against the bull. Without barking, he will naturally fly at and seize the fiercest bull; running directly at his head, and sometimes catching hold of his nose, he will pin the bull to the ground, nor can he without great difficulty be made to quit his hold. Such is his rage, that at a bull-fight in the north of England, a brute, in the shape of a man, laid a wager that he would successively cut off the feet of his dog, and that the animal should return to the attack after each amputation; this horrible experiment was tried, and the wager was won. Though we have not to record any act of barbarity, so outrageous as that just related, having taken place in this county, yet it is with regret we have to notice that that useful and noble animal the bull, has been too often put to the torture by exhibitions of that nature; to afford amusement to a few unprincipled men, whose callous feelings, and ferocious anxiety, has been depicted in their countenances, when they have beheld their favourite dog gored and tossed in the air. These scenes, so hurtful to the feelings of humanity, and injurious to the morals of society, are much less frequent than they were twenty years ago.

The Shepherd Dog is a valuable assistant to man in the mountainous districts of this

county, where large flocks of sheep are kept. We have seen the shepherd take his station on a hill, and give orders to his dog to fetch his flock around him, and the faithful animal has obeyed his master with the greatest alacrity.

The Coach Dog is a beautiful animal, marked with spots of various colours. Naturalists disagree as to its origin. By some it is said to be the common harier of Italy. Its powers of smelling is but indifferent, and it is generally kept in genteel houses as a handsome attendant on the carriage.

The Greyhound is a fleet and elegantly formed animal, and was once held in such high estimation, that it was the frequent companion of a gentleman; who was anciently known by his horse, his hawk, and his greyhound. It was in such repute, that king Canute enacted a law, that it should not even be kept by any one who was under the rank of a gentleman. It is the swiftest of the dog kind, and easily trained for the chase when twelve months old; it courses by sight, and not by scent, as other hounds do; and is supposed to outlive all the dog tribe. The coursing meetings held in this county, at Sudbury and Chatsworth, are generally well attended. They attract gentlemen from distant parts of the kingdom, which causes an incitement amongst the gentry of this county, who are lovers of that diversion, to pay great attention in having the best breed of dogs of this description. The Right Hon. Lord Vernon; Abraham Hoskins, esq. of Newton Solney; Samuel Rowland, esq. of Derby; Rev. Charles Stead Hope, of Derby; William Milnes, esq. of Ashover; Thomas Hallowes, esq. of Glapwell; Joseph Hassall, esq. of Packington; Colonel Halton, of Winfield; James Hunloke, esq. of Birdholme, and several other gentlemen, are celebrated for having excellent dogs.

The Fox Hound is closely allied to the beagle, though larger, more swift and vigorous. It is ardent in the chase, and frequently outstrips the fleetest sportsman. A mixed breed, between this and the large terrier, forms a strong, active and hardy hound, which is used in hunting the otter. The pack of fox hounds, kept by Hugo Meynell, esq. for the diversion of the gentlemen in the south and south-west division of the county, and those kept by Sir George Sitwell, bart. in the Scarsdale hundred, are excellent.

> My hounds are of the Spartan kind,
> So fleeced, so sanded; and their heads are hung
> With ears that sweep away the morning dew;
> Crook'd kneed, and dew-lapp'd like Thessalian bulls;
> Slow in pursuit, but match'd in mouth like bells,
> Each under each. A cry more tuneable
> Was never hallo'd to, nor cheer'd with horn
> In Crete, in Sparta, nor in Thessaly.
> *Midsummer Night's Dream.*

The Beagle is the smallest hound used in the chase, and is chiefly employed in hunting hares, which are numerous in some parts of the county. It is remarkable for the melody of its tone and the keenness of its scent. Of this dog there are two varieties, the rough beagle and the smooth beagle. Sir Henry Every, bart. of Egginton hall, has a superior pack of hounds of this kind; and Thomas Caril Worsley, esq. of Overton hall, in the parish of Ashover, has also an excellent pack of these dogs.

The Terrier is a small thickset hound, of which there are two distinct varieties, the one with short legs, long back, and commonly of a black or yellowish colour, mingled with white; the other is a more sprightly animal, with a shorter body, and of various colours, as black, brown, white, &c. It has a most acute sense of smelling, and is an inveterate enemy to all kinds of vermin. Its courage is not excelled by any other dog; it will encounter the badger with great bravery, and though it often receives severe wounds from its competitor, it bears them with great fortitude. As it is very expert in forcing foxes and other game out of their coverts, and being particularly hostile to the fox, it is generally an attendant on every pack of hounds.

The Spanish Pointer is derived, as its name implies, from Spain, but has been long naturalized in this country, where great attention has been paid to preserve the breed in all its purity. It is remarkable for the quickness and facility with which it receives instruction, and may be said to be almost self-taught; whilst the English pointer requires the greatest care and attention in breaking and training for the sport. It is not so capable of enduring fatigue as the English pointer. These dogs are chiefly employed in finding pheasants, partridges, hares and other game.

The English Setter is considered one of the most valuable of our hunting dogs; it is hardy, nimble and handsome, and possessed of exquisite scent and sagacity. Its manner of seeking game is correctly and poetically described, in the following lines, by Somerville:

> When autumn smiles, all beauteous in decay,
> And paints each chequer'd grove with various hues,
> My *setter* ranges in the new-shorn fields,
> His nose in air erect; from ridge to ridge

Panting he bounds, his quarter'd ground divides
In equal intervals, nor careless leaves
One inch untried; at length the tainted gales
His nostrils wide inhale: quick joy elates.
His beating heart, which, awed by discipline
Severe, he dares not own, but cautious creeps,
Low cowering step by step, at last attains
His proper distance: there he stops at once,
And points with his instructive nose
Upon the trembling prey.

The Springer is a lively animal, and very expert in raising woodcocks and snipes from their haunts in woods and marshes, through which it ranges with an untireable perseverance.

The Spaniel is of Spanish extraction, as its name imports. It is elegant in form, with long pendant ears, and hair of silky softness, gracefully curled or waved; its scent is keen, and it possesses the qualities of sagacity, docility and attachment. So strong is the latter, that instances have been known in which this animal has died of grief for the loss of its master. This species may be taught a variety of tricks, such as fetching, carrying, and diving. He is employed in hunting the partridge, quail, &c. and his steadiness and patience in the performance of his task, is worthy of admiration.

The water Spaniel appears to be, of all the dog kind, the most attached to man, and more docile than any other. Many of the species are impatient of correction, but the water spaniel, though fierce to strangers, bears blows and ill-usage from his master with undiminished affection. This animal is well calculated for hunting water-fowls, &c. Watching the stroke of the piece, and perceiving the game that is shot, he instantly swims after it and brings it to his master. He will fetch and carry at command.

The Wolf, *Canis Lupus.*—Now happily become extinct, was formerly an inhabitant of the High Peak, which district was much infested by them. John de Wolfehunt, who died in the second year of the reign of Edward II. held one messuage and fifteen acres of land, by the service of taking wolves in the forest of the king, in the Peak of Derbyshire.

This animal is about three feet six inches long, and about two feet six inches high. They were formerly numerous in England, but are now completely extirpated. It is found in almost every country in the temperate and cold regions of the globe.

The Fox, *Canis Vulpes.*—Tail a brush, tipped with white, legs white, fore-feet black, body reddish brown, length two feet, brush thirteen inches, height thirteen inches.

This animal, one of the most crafty of the beasts of prey, is a native of almost every quarter of the globe, and is found in every part of this county; but in the greatest number at Bradley and Shirley park, in the neighbourhood of Ashbourn. He is smaller and more slender than the wolf, and has a strong offensive smell, which is peculiar to the species. He feeds on poultry, young hares and rabbits, seizes the sitting partridges and the quail, and destroys a large quantity of game. In short, nothing that can be eaten seems to come amiss; for when pressed by hunger, he will prey on rats, mice, serpents, toads, lizards, insects and vegetables; neither the hedgehog, the wild bee or the wasp, are secure from this determined glutton. The bitch fox produces but once a year, and seldom has more than four or five cubs at a litter.

The wild Cat, *Felis Catus.*—Tail long, annulated body, marked with spiral and three longitudinal stripes.

This animal is said to be an inhabitant of Derbyshire; it being the fiercest and most destructive of our animals, may not improperly be denominated the British tiger. Its head is larger, and its limbs are stronger than the domestic cat, which are less in size and of various colours. The domestic cat, which is the wild cat reclaimed, is the only one of the feline race, the services of which man has yet been able to turn to account.

The Badger, *Ursus Meles.*—The general length of this animal is two feet six inches, exclusive of the tail; the upper part of the body is of a grey colour, and the under parts wholly black; tail short, with long stiff hair, face black and white, fore claws long, a transverse orifice between the tail and the anus, and three black bristles over each eye.

The badger is a solitary inoffensive animal, that lives remote from man, and digs itself a deep winding hole with great assiduity, its legs being very strong and its claws stiff and horny. When surprised by dogs, it falls upon its back, combats with desperate fury, and seldom dies unrevenged on its enemies. This harmless animal, like the bear, is often subjected to much cruelty in being baited by dogs for the amusement of the peasantry. Such barbarous practices should, in this enlightened age, be abolished.

The Otter, *Lutra vulgaris.*—Colour dark brown, with two white spots on each side the nose, the head and nose are broad and flat, the neck is short, the body long, the tail broad at the insertion but tapers to a point, and about fourteen inches long, the eyes small, ears short, whiskers long, and mouth somewhat like that of a fish. The legs are very short, strong, broad and muscular, and so placed as to be capable of being brought into a line with the body, and performing the office of fins; each foot has five toes, connected by strong broad

webs, like those of water fowl. Its length is four feet, height nine inches, and weighs, when full grown, from 20 to 28 lbs.

These voracious animals are frequently found in the Trent, the Derwent, and the smaller rivers communicating with them, in which they destroy more fish than they can devour. In rivers, where weirs are set, the otter will force its way in and destroy the fish, and then effect its passage out by biting asunder the twigs of which the weir is made. It lives in holes under ground, the opening to which is beneath the surface of the water; it burrows upwards, and provides several cells to retire into in case of floods, in which it displays great sagacity. The female goes with young about nine weeks, and generally produces four or five at a time; if taken while young, they are capable of being tamed, and taught to fish for their owner, which they will do with the greatest address, as they are capable of remaining a long time under water. They afford much diversion in hunting, and no animal defends itself with greater obstinacy, or makes a more desperate resistance against its enemies. The dogs are frequently maimed in the conflict, as its bite is extremely severe.

The Fitchet or Polecat, *Viverra Putorius.*—Length of the body seventeen inches, tail seven inches, colour a deep chocolate, approaching to black, muzzle and ears white, and nose sharp.

In summer, this animal generally lives in woods or rabbit warrens, as rabbits seem to be their favourite prey, and a single polecat is often sufficient to destroy a whole warren. In winter he haunts barns, hay-lofts, and other out-houses, from whence he sallies forth on the poultry. Its fierceness is remarkable; when confined and unable to escape, it will attack dogs, and it has the faculty, when irritated, to send forth an offensive stench to annoy and drive away its enemies.

The Marten, *Viverra Foina.*—Is rather longer than the polecat, and its colour is more elegant, the scent of it is considered as an agreeable perfume, and it is the most beautiful of all the British beasts of prey.

These animals are found in all the northern parts of the world, from Siberia to Canada and China. They are chiefly hunted for their skins; of which, it is said, upwards of forty thousand are annually imported into England.

The Ferret.—Resembles the polecat in his manners and habits, yet is evidently a distinct species.

This animal is used for driving rabbits from their burrows into the nets which are set for them; when employed this way they are always muzzled. They are also of great service in driving rats and mice out of corn stacks, &c.

The Weasel, *Viverra Vulgaris.*—This is the smallest of this numerous species, and it is a handsome little animal, about nine inches long; the upper part of the body and tail is of a tawny colour, and the throat and belly is white.

This animal destroys rats, mice, moles, poultry, pigeons, rabbits, hares, &c. and will suck the eggs of birds and poultry. It moves by unequal leaps, and can spring several feet from the ground, or run up a wall without difficulty.

The Stoat or Ermine, *Viverra Erminea.*—A beautiful white variety, with the tail tipped with black, is sometimes seen.

These too, are so fierce that they will devour rats, young hares or poultry. A cat larger than themselves will fly instantly at their approach. All the weasel tribe have long and slender bodies, short legs and great flexibility of motion, the latter of which is in consequence of the articulation of the spine. They are thus well calculated to pursue their prey through narrow and deep recesses. They destroy all about them before they attempt to satisfy their appetite, and suck the blood before they begin to eat the flesh.

The Hedgehog or Urchin, *Erinaceus Europæus.*—It is covered with prickly quills, and resembles the porcupine in that particular, but it differs from it in other respects. It is from nine to eleven inches long, the head, back and sides are covered with spines, and the nose, breast and belly with fine soft hair; it has five toes on each foot, and a long snout, resembling that of the pig.

This animal generally resides in hedge-rows or thicksets, and feeds on fallen fruits, roots and insects. It swims well, and makes a deep warm herbernaculum with leaves and moss, in which it conceals itself for the winter. The female produces from three to five young ones at a birth, which are born blind; and when attacked, defends itself by rolling its body up like a ball, exposing no part that is not covered with its sharp weapons. The hedgehog has frequently been persecuted, in consequence of an absurd belief, that it bites the udders of cows, while sucking them, an operation it cannot perform, because it has such a small mouth.

The Mole, *Talpa Europæa.*—Of which there are seven species, is generally six or seven inches long, it has a long snout, fore-legs short, with broad feet turned outwards, five toes on each foot, small eyes, no external ears, and is covered with glossy black hair, remarkably soft.

This animal is admirably formed for its habits of living under ground. It principally lives

on worms and the larva of insects, and though it is a great destroyer of earth worms, it is injurious to land and crops, by raising hillocks. The female usually produces four or five young ones about April. The habitations in which they are deposited, are constructed with peculiar care and intelligence. Moles live in pairs, between which a warm attachment subsists.

THE HARE, *Lepus Timidus.*—Ears tipped with black, eyes prominent, whiskers long, colour a rich brown, mostly abounding on light dry soils.

Of this tribe there are several species, all of which are herbivorous, and exceedingly timid. Their fear is indeed justified by the continual persecution which they experience. The hare numbers among its enemies the sportsman, dogs, cats, all the weasel tribe, birds of prey, &c. so that, although its natural term of life does not usually exceed eight years, it seldom survives half that scanty period. It is endowed with great fleetness and sagacity, and uses a variety of arts to evade the dogs. When pursued, it has been known to push another hare from its seat and lie down there itself. The female breeds four times a year, it goes with young thirty days, and generally brings forth three or four at a time, which are suckled about three weeks, and then left to procure food for themselves. They generally feed in the night, upon the most tender blades of grass, and quench their thirst with the dew. They also live upon roots, leaves, fruit and corn, are particularly fond of parsley, birch, lettuce, pinks, sowthistle, and such plants as are furnished with milky juice, and during winter they strip the bark off trees. They are numerous at Egginton, Sudbury, Chatsworth, Alderwasley, Hopton, Shipley, &c. One of a grey colour is in the collection of preserved animals at Park Hill, the seat of A. N. Moseley, esq.

THE RABBIT, *Lepus Cuniculus.*—Ears almost naked, pupil of the eyes red.

In fecundity the rabbit far surpasses the hare, as it breeds seven times in the year, and generally produces seven or eight young ones at a time; so that, were this to happen regularly for four years, the progeny from a single pair would amount to almost a million and a half. Their enemies are so numerous as to prevent such amazing increase. Their fur is used in the manufacture of hats. They abound in Middleton wood, Alderwasley, Hopton, Brassington moor, Rowsley, Ible, Griffe grange, &c.

THE BROWN RAT, *Mus Decumanus.*—Length of the body nine inches, tail nine inches, back tawny, belly a dirty white, feet and legs almost bare, and tail scaly.

This species has nearly extirpated the black rat, but they are a dreadful substitute; they swarm about farm houses, destroying pigeons, poultry, leather, and all kinds of grain in great quantities. Though so rapacious and fierce, they are great cowards, being put to flight in a moment, or destroyed, if caught by the ferret, or by our native animal the weasel, which are both much less than themselves. So prolific are they, and so rapidly do they multiply, that the progeny of a single pair might, in two years time, be swelled to a million. They are therefore very injurious and destructive to mankind.

THE WATER RAT, *Mus Amphibius.*—Length of the body seven inches, tail five inches, body covered with long hairs, brownish black, belly grey, tail black, ears and eyes small.

THE COMMON MOUSE, *Mus Musculus.*—Differs very little from the common rat except in size, in other respects similar.

This well-known little animal, which is diffused in great numbers over almost every part of the world, seems a constant attendant on man. Its enemies are numerous and powerful, and it has no means of resistance; its amazing fecundity only, saves it from extinction. Its skin is sleek and soft, its eyes are bright and lively, all its limbs are formed with exquisite delicacy, and its motions are smart and active.

THE FIELD MOUSE, *Mus Sylvaticus.*—Is larger than the common mouse, back brown, belly grey.

THE SHORT-TAILED FIELD MOUSE, *Mus Arvalis.*—Length of the body two inches and a half, tail two inches, ears naked, weight one-sixth of an ounce. They live in burrows under ground, and feed principally on acorns, nuts, and beech mast.

The harvest mouse is the smallest of British quadrupeds. This kind makes a beautiful nest, which they hang above the ground, and produce eight or nine young ones; in winter they burrow deep in the earth, and make warm beds of grass; but their grand rendezvous is in corn ricks, into which they are carried in harvest.

THE DORMOUSE, *Myoxus Muscardinus.*—Found in oat ricks.

THE SHREW MOUSE, *Sorex Araneus.*—Snout and tail long, above brown, beneath dirty white, five toes on each foot, small eyes, length four inches, weight 1 oz.

THE WATER SHREW, *Sorex Fodiens.*

THE COMMON SQUIRREL, *Sciurus Vulgaris.*—Colour reddish brown, belly white, ears tufted, tail a brush, upper fore-teeth like wedges, lower compressed.

It is said to do much injury to fir plantations in severe winters. Though naturally wild, it soon becomes familiarized to confinement; and though timid, it is easily taught to receive the most familiar caresses from the hand that feeds it, which causes it to be a general favourite. It usually lives in woods, and seldom descends upon the ground, but leaps from

tree to tree with surprising agility. It feeds on nuts, fruits, acorns, &c. in winter, and in summer on buds and young shoots. When it eats it sits erect, and uses its fore-feet as hands to convey food to its mouth. They are numerous at Kedleston.

The Bat, *Vespertilio Murinus.*—The common English bat is about the size of a mouse; teeth sharp and pointed, length two inches and a half, and flies like a bird.

The membranes, commonly called wings, are, in fact, nothing more than an extension of the skin all round the body; the skin is stretched on every side, when the animal flies, by the four inner toes of the fore-feet. They drink on the wing like the swallow, by sipping the surface as they play over pools and streams. They love to frequent waters, not only for the sake of drink, but on account of insects, which are found over them in the greatest plenty. They feed upon gnats, moths, and nocturnal insects of every kind, and appear only in the most pleasant evenings, when such prey is abroad. The bat, of which there are several species, seems at first sight to belong to the class of birds, or at least to constitute the link which connects the tribes of birds and beasts. Its hair, teeth, habits and conformation, all combine to rank it among quadrupeds.

The Long-eared Bat, *Vespertilio Auritus.*—This is one of the most common English bats, and may be frequently seen during the summer evenings, pursuing the various insects on which it feeds.

The Great Bat, *Vespertilio Noctula.*—The largest of the British species.

CLASS 2. BIRDS.

Of all the classes of animated creation, there is no one more calculated at once to afford pleasure and excite astonishment than that which consists of the feathered tribes. That a living creature, often of great magnitude, should be able to traverse rapidly and to remain buoyant in so thin a medium as the atmosphere, is alone sufficient to excite wonder. When we come to examine the means by which this is effected, we shall find abundant reason to admire the wisdom of the Creator, in so perfectly adapting each part to answer its intended purpose. The feathers are furnished with glands to secrete an oily matter, that they may not absorb wet; the bones are exceedingly light, yet strong; the muscles which belong to the wings are of such magnitude, that they constitute not less than one-sixth of the body; air vessels are extended through the whole frame, to prevent the respiration from being stopped by the rapidity of the flight; the sight is piercing, and the eyes are defended from injury by a membrane, which can be dropped over them at will; and the shape of the bird is that which is most proper for moving rapidly through the regions of air.

Ornithology, and every other branch of Natural History, has been studied with peculiar care, diligence and success by Willoughby (a native of Derbyshire) Ray, Edwards, Latham, Shaw and Pennant. The last-mentioned author has given so full and accurate a description of the birds found in Great Britain, that very little additional information can be given, by describing those found in any particular district. However, it may be useful to give a Catalogue of such as have been observed in this county. Derbyshire, being in the centre of the kingdom, and having a variety of surface and a difference or change of climate within so short a space, is perhaps furnished with as great a variety of the feathered tribe as any other district in the island of Great Britain.

A good ornithologist, says the Rev. G. White, should be able to distinguish birds in the air as well as by their colours and shape; on the ground as well as on the wing, and in the bush as well as in the hand. For, though it must not be said that every *species* of birds has a manner peculiar to itself, yet there is somewhat in most *genera* at least, that at first sight discriminates them, and enables a judicious observer to pronounce upon them with some certainty. Put a bird in motion

"—— Et vera incessu patuit ——."

Thus *kites* and *buzzards* sail round in circles with wings expanded and motionless; and it is from their gliding manner that the former are still called in the north of *England gleads*, from the *Saxon* verb *glidan*, to glide. The *kestrel* or *wind-hover*, has a peculiar mode of hanging in the air in one place, his wings all the while being briskly agitated. *Henharriers* fly low over heaths or fields of corn, and beat the ground regularly like a pointer or setter-dog. *Owls* move in a buoyant manner, as if lighter than the air; they seem to want ballast. There is a peculiarity belonging to *ravens* that must draw the attention even of the most incurious—they spend all their leisure time in striking and cuffing each other on the wing in a kind of playful skirmish; and when they move from one place to another, frequently turn on their backs with a loud croak, and seem to be falling to the ground. When this odd gesture betides them, they are scratching themselves with one foot, and thus lose the centre of gravity. *Rooks* sometimes dive and tumble in a frolicsome manner; *crows* and *daws* swagger in their walk; *woodpeckers* fly *volatu undoso*, opening and closing

their wings at every stroke, and so are always rising or falling in curves. All of this genus use their tails, which incline downward, as a support while they run up trees. *Parrots*, like all other hooked-clawed birds, walk awkwardly, and make use of their bill as a third foot, climbing and descending with ridiculous caution. All the *gallinæ* parade and walk gracefully, and run nimbly; but fly with difficulty, with an impetuous whirring, and in a straight line. *Magpies* and *jays* flutter with powerless wings, and make no despatch; *herons* seem encumbered with too much sail for their light bodies; but these vast hollow wings are necessary in carrying burthens, such as large fishes, and the like; *pigeons*, and particularly the sort called *smiters*, have a way of clashing their wings the one against the other over their backs with a loud snap; another variety called *tumblers* turn themselves over in the air. Some birds have movements peculiar to the season of love: thus *ring-doves*, though strong and rapid at other times, yet in the spring hang about on the wing in a toying and playful manner; thus the *cock-snipe*, while breeding, forgetting his former flight, fans the air like the wind-hover: and the *green-finch* in particular exhibits such languishing and faltering gestures as to appear like a wounded and dying bird; the *king-fisher* darts along like an arrow; *fern-owls*, or *goat-suckers*, glance in the dusk over the tops of trees like a meteor; *starlings*, as it were, swim along, while *missel-thrushes* use a wild and desultory flight; *swallows* sweep over the surface of the ground and water, and distinguish themselves by rapid turns and quick evolutions; *swifts* dash round in circles; and the *bank-martin* moves with frequent vacillations like a butterfly. Most of the small birds fly by jerks, rising and falling as they advance. Most small birds hop; but *wagtails* and *larks* walk, moving their legs alternately. *Skylarks* rise and fall perpendicularly as they sing; *woodlarks* hang poised in the air; and *titlarks* rise and fall in large curves, singing in their descent. The *white-throat* uses odd jerks and gesticulations over the tops of hedges and bushes. All the *duck-kind* waddle; *divers* and *auks* walk as if fettered, and stand erect on their tails: these are the *compedes* of *Linnæus*. *Geese* and *cranes*, and most wild-fowls, move in figured flights, often changing their position. The secondary *remiges* of *Tringæ*, *wild ducks*, and some others, are very long, and give their wings, when in motion, an hooked appearance. *Dab-chicks*, *moor-hens*, and *coots*, fly erect, with their legs hanging down, and hardly make any despatch; the reason is plain, their wings are placed too forward out of the true centre of gravity; as the legs of *auks* and *divers* are situated too backward.

From the motion of birds, the transition is natural enough to their notes and language, of which we shall say something. Not that we would pretend to understand their language like the *vizier*; who, by the recital of a conversation which passed between two owls, reclaimed a sultan,* before delighting in conquest and devastation; but we would be thought only to mean that many of the winged tribes have various sounds and voices adapted to express their various passions, wants, and feelings; such as anger, fear, love, hatred, hunger, and the like. All species are not equally eloquent; some are copious and fluent, as it were, in their utterance, while others are confined to a few important sounds: no bird, like the fish kind, is quite mute, though some are rather silent. The language of birds is very ancient, and, like other ancient modes of speech, very elliptical; little is said, but much is meant and understood.

The notes of the *eagle* kind are shrill and piercing; and about the season of nidification much diversified. The notes of our *hawks* much resemble those of the king of birds. *Owls* have very expressive notes; they hoot in a fine vocal sound, much resembling the *vox humana*, and reducible by a pitch-pipe to a musical key. This note seems to express complacency and rivalry among the males; they use also a quick call and a horrible scream; and can snore and hiss when they mean to menace. *Ravens*, beside their loud croak, can exert a deep and solemn note that makes the woods to echo; the amorous sound of a *crow* is strange and ridiculous; *rooks*, in the breeding season, attempt sometimes, in the gaiety of their hearts, to sing, but with no great success; the *parrot* kind have many modulations of voice, as appears by their aptitude to learn human sounds; *doves* coo in an amorous and mournful manner, and are emblems of despairing lovers; the *woodpecker* sets up a sort of loud and hearty laugh; the *fern-owl*, or *goat-sucker*, from the dusk till day-break, serenades his mate with the clattering of castanets. All the tuneful *passeres* express their complacency by sweet modulations, and a variety of melody. The *swallow*, by a shrill alarm, bespeaks the attention of the other *hirundines*, and bids them be aware that the hawk is at hand. Aquatic and gregarious birds, especially the nocturnal, that shift their quarters in the dark, are very noisy and loquacious; as cranes, wild-geese, wild-ducks, and the like; their perpetual clamour prevents them from dispersing and losing their companions.

In so extensive a subject, sketches and outlines are as much as can be expected: for it would be endless to instance in all the infinite variety of the feathered nation. We shall therefore confine the remainder of these observations to the few domestic fowls of our yards, which are most known, and therefore best understood. And first the *peacock*, with his gorgeous train, demands our attention; but, like most of the gaudy birds, his notes are grating and shocking to the ear: the yelling of cats, and the braying of an ass, are not more disgust-

* See Spectator, Vol. vii. No. 512.

ful. The voice of the *goose* is trumpet-like and clanking; and once saved the Capitol at *Rome*, as grave historians assert: the hiss also of the *gander* is formidable and full of menace, and "protective of his young." Among *ducks* the sexual distinction of voice is remarkable; for while the *quack* of the female is loud and sonorous, the voice of the *drake* is inward and harsh, and feeble, and scarcely discernible. The cock *turkey* struts and gobbles to his mistress in a most uncouth manner; he hath also a pert and petulant note when he attacks his adversary. When a hen *turkey* leads forth her young brood she keeps a watchful eye: and if a bird of prey appear, though ever so high in the air, the careful mother announces the enemy with a little inward moan, and watches him with a steady and attentive look; but, if he approach, her note becomes earnest and alarming, and her outcries are redoubled.

No inhabitants of a yard seem possessed of such a variety of expression and so copious a language as common poultry.* Take a chicken of four or five days old, and hold it up to a window where there are flies, and it will immediately seize its prey, with little twitterings of complacency; but if you tender it a wasp or a bee, at once its note becomes harsh and expressive of disapprobation and a sense of danger. When a pullet is ready to lay, she intimates the event by a joyous and easy soft note. Of all the occurrences of their life that of *laying* seems to be the most important; for no sooner has a hen disburthened herself, than she rushes forth with a clamorous kind of joy, which the cock and the rest of his mistresses immediately adopt. The tumult is not confined to the family concerned, but catches from yard to yard, and spreads to every homestead within hearing, till at last the whole village is in an uproar. As soon as a hen becomes a mother her new relation demands a new language; she then runs clucking and screaming about, and seems agitated as if possessed. The father of the flock has also a considerable vocabulary; if he finds food, he calls a favourite concubine to partake; and if a bird of prey passes over, with a warning voice he bids his family beware. The gallant *chanticleer* has, at command, his amorous phrases and his terms of defiance. But the sound by which he is best known is his *crowing:* by this he has been distinguished in all ages as the countryman's clock or larum, as the watchman that proclaims the divisions of the night. Thus the poet elegantly styles him

> "—— the crested cock, whose clarion sounds
> The silent hours."

According to the most generally received modification of the Linnæan System, the LAND BIRDS are divided into five Orders, viz. 1st, ACCIPITRES *(rapacious;)* 2nd, PICÆ *(the pie kind;)* 3rd, PASSERES *(passerine, or sparrow kind;)* 4th, COLUMBÆ, or PALUMBES *(the doves;)* 5th, GALLINÆ *(gallinaceous.)* The WATER BIRDS are divided into three Orders, 6th, GRALLÆ *(waders;)* 7th, PINNATIPEDES *(with pinnated feet;)* and 8th, PALMIPEDES *(web-footed.)* A more detailed description of the Orders and Genera will be found below.

LAND BIRDS.

ORDER 1. ACCIPITRES.

Bill more or less incurved, the upper mandible either dilated towards the point, or armed with a tooth-like process each side; legs short, with three toes forwards and one backwards; toes warty underneath.

1. *Falco*, bill hooked, covered with a naked cere at the base; nostrils placed in the cere; tongue cloven; middle toe connected with the outermost as far as the first joint.
2. *Strix*, bill hooked, without cere; nostrils oblong, covered with recumbent bristles; tongue cloven; head, ears and eyes large; outmost toe capable of being turned backwards; exterior web of the outer quill-feather serrate.
3. *Lanius*, bill straight, hooked at the end, with a tooth each side of the upper mandible near the tip, naked at the base; tongue jagged at the end; outer toe connected to the middle one as far as the first joint.

* The Rev. Gilbert White, in his Natural History of Selborne, says, "A neighbouring gentleman one summer had lost most of his chickens by a sparrow-hawk, that came gliding down between a fagot pile and the end of his house to the place where the coops stood. The owner, inwardly vexed to see his flock thus diminishing, hung a setting net adroitly between the pile and the house, into which the caitiff dashed, and was entangled. Resentment suggested the law of retaliation; he therefore clipped the hawk's wings, cut off his talons, and fixing a cork on his bill, threw him down among the brood-hens. Imagination cannot paint the scene that ensued; the expressions that fear, rage, and revenge, inspired, were new, or at least such as had been unnoticed before: the exasperated matrons upbraided, they execrated, they insulted, they triumphed. In a word, they never desisted from buffeting their adversary till they had torn him in an hundred pieces."

Order 2. Picæ.

Bill sharp-edged, convex above, without the tooth-like process on the upper mandible.

1. *With three toes before and one behind.*

4. *Corvus*, bill mostly straight, strong, pointed; nostrils covered with recumbent bristles; tongue cloven at the end; outer toe connected with the middle one as far as the first joint.

9. *Sitta*, bill straight, strong, pointed, the upper mandible a little longer, compressed and angular at the tip; nostrils covered with recumbent bristles; tongue short, with a horny jagged point; middle toe closely connected to the others at the base, the back toe as large as the middle one.

10. *Certhia*, bill slender, bowed, acute; tongue shorter than the bill, pointed; tail of twelve stiff pointed feathers; hind toe very large; claws long, hooked.

8. *Alcedo*, bill triangular, straight, strong, pointed; nostrils covered with feathers; tongue very short, flat, acute; middle toe connected by the three lower joints to the outermost.

2. *With two toes before and two behind, all divided to their origin.*

5. *Cuculus*, bill roundish, weak, a little bowed; nostrils bordered by a narrow rim; tongue arrow-shaped, short, pointed; tail of ten long wedge-shaped feathers.

6. *Jynx*, bill roundish, slightly curved, weak; nostrils concave, without feathers; tongue very long, slender, cylindrical, with a horny point; tail of ten even soft rounded feathers.

7. *Picus*, bill angular, straight, strong, wedge-shaped at the tip; nostrils covered with recumbent bristles; tongue very long, cylindrical, with a horny jagged point; tail of ten stiff pointed feathers.

Order 3. Passeres.

Bill conic, pointed; nostrils oval, pervious; toes slender, three before and one behind; claws slender, curved.

1. *With a thick conic bill.*

14. *Loxia*, bill strong, convex above and below, very thick and rounded at the base; the lower mandible bent in at the edge; nostrils small, round, at the base of the bill; tongue entire, truncate.

15. *Emberiza*, bill strong, conic; the sides of each mandible bending inwards; the upper one narrower, with a hard gibbosity in the roof; tongue pointed, covered with a hard scale at the end.

16. *Fringilla*, bill perfectly conic, slender towards the end, pointed; tongue covered at the end with a hard scale.

2. *Upper mandible a little bent at the point.*

22. *Hirundo*, bill short, small and a little incurved at the point, broad and depressed at the base; nostrils open; tongue short, broad, cloven; gape larger than the head; wings long; tail forked.

23. *Caprimulgus*, bill short, a little incurved at the point, depressed at the base, with a row of stiff bristles at the base of the upper mandible; nostrils tubular, a little prominent; tongue small, entire; tail entire, of forty feathers; toes connected as far as the first joint; the claw of the middle one broadish and serrate.

3. *Upper mandible slightly notched near the point.*

12. *Turdus*, bill nearly straight, a little bending towards the point; nostrils oval, naked; mouth with a few slender hairs at the corners; tongue slightly jagged at the end; middle toe connected to the outer as far as the first joint.

13. *Ampelis*, bill straight, a little convex, bending towards the point: nostrils hid in reflected bristles; tongue sharp, cartilaginous, cloven: middle toe connected with the first as far as the first joint.

17. *Muscicapa*, bill flattish at the base, nearly triangular, beset with bristles at the base; tongue cloven, rough on the sides; toes divided to their origin.

4. *Bill straight, taper, entire.*

11. *Sturnus*, bill subulate, angular, depressed, rather obtuse, the edges of the upper mandible a little spreading: nostrils surrounded with a rim; tongue cloven, acute; middle toe connected to the outer as far as the first joint.

18. *Alauda*, bill straight, slender, a little curved at the point; nostrils partly covered with feathers and bristles; tongue cloven, acute; toes divided to their origin; the hind-claw very long and more straight.

19. *Motacilla*, bill straight, weak, slender, slightly notched at the end; nostrils covered with bristles; tongue lacerated at the point; wings short; tail very long.

20. *Sylvia*, bill straight, weak, slender; nostrils obovate, a little depressed; tongue cloven; middle toe connected underneath to the outer one at the base.

21. *Parus*, bill strong, pointed, a little compressed; nostrils round, covered with reflected bristles; tongue truncate, bristly at the end; toes divided to their origin, the back toe large and strong.

Order 4. Columbæ.

Bill nearly straight, tumid at the base; legs short; toes three before and one behind; divided to the origin.

24. *Columba*, bill weak, slender, descending towards the point; nostrils oblong, lodged in a soft protuberance; tongue entire.

Order 5. Gallinæ.

Bill convex; the upper mandible arched over the lower; nostrils arched over the cartilaginous membrane; toes rough underneath, divided to their origin.

25. *Phasianus*, bill short, strong; cheeks more or less covered with caruncled flesh bare of feathers; legs generally armed with a spur.
26. *Tetrao*, bill short, strong; head covered with a warty skin, bare of feathers over the eyes; nostrils small, hid in the feathers; tongue pointed; legs feathered down to the toes.
27. *Perdix*, bill short, strong; head without the naked skin over the eyes, but often warty; nostrils covered above with a prominent callous rim; legs bare of feathers below the knees; often armed with spurs; tail short.
28. *Otis*, Bill a little convex; nostrils ovate, open; legs bare of feathers above the knees; toes only three, all placed forwards.

WATER BIRDS.

Order 6. Grallæ.

Bill more or less cylindrical; legs long, naked above the knees; toes divided to their origin, or connected by a membrane at the base.

29. *Ardea*, bill long, straight, acute, a little compressed, with a groove from the nostrils towards the tip; nostrils linear; tongue acute; feet four toed, the toes connected at the base.
30. *Numenius*, bill long, curved; face covered with feathers; nostril linear near the base of the bill; tongue short, acute; feet four-toed, the toes connected as far as the first joint.
31. *Scotopax*, bill slender, straight, weak, obtuse, longer than the head; nostrils linear, lodged in a groove; tongue acute; feet four-toed, the toes slightly connected or cloven to their origin, back toe small.
32. *Tringa*, bill straight, slender, as long as the head; nostrils small; tongue slender; feet four-toed, divided to their origin, or slightly connected; back toe weak, and often raised from the ground.
33. *Charadrius*, bill straight, slender, obtuse; nostrils linear; feet three-toed, all placed forward.
34. *Hæmatopus*, bill long, straight, compressed, wedge-shaped at the end; nostrils linear, tongue short, toes three, all placed forwards, the middle one connected to the outer one as far as the first joint.
35. *Rallus*, bill slender, compressed, slightly incurved; nostrils small; tongue rough at the end; body compressed; wings and tail short; feet four-toed, cloven to their origin.
36. *Gallinula*, bill thick at the base, sloping to the point, the upper mandible reaching far up the forehead, where it becomes membranaceous; body compressed; wings and tail short; feet four-toed, cloven to their origin.

Order 7. Pinnatipedes.

Bill more or less cylindrical; legs long, naked above the knees; toes divided to their origin, with a membrane running down their whole length each side.

37. *Phalaropus*, bill straight, slightly inflected at the point; nostrils minute; feet four-toed; the toes furnished with pennate or toothed membranes.
38. *Fulica*, bill short, strong, sloping to the point, running far up the forehead, which is bald; nostrils oblong, pervious; body compressed; tail short; toes four, furnished with a scalloped membrane.
39. *Podiceps*, bill straight, slender, pointed; nostrils linear; tongue slightly cloven; lores bare of feathers; body a little depressed; tail none; legs compressed; the shanks with a double row of serratures behind; toes four, connected at the base, furnished with a simple membrane; claws flat, rounded.

Order 8. Palmipedes.

Toes connected with each other by a web.

40. *Colymbus*, bill strong, straight, pointed; upper mandible longer, the edges of each turning inwards; nostrils linear; tongue long, pointed, toothed each side near the base;

legs thin, flat; toes four, the outer one longer, back toe small, connected by a small membrane to the inner one; tail short, of twenty or more feathers.

41. *Sterna*, bill straight, slender, pointed, a little compressed; nostrils linear; tongue slender, pointed; wings very long; toes four, slender; the back toe very small, and unconnected with the rest; tail mostly short.

42. *Larus*, bill strong, straight, bending down at the point, with an angular prominence on the under part of the lower mandible; nostrils linear, broader on the fore-part, placed in the middle of the bill; tongue slightly cloven; legs naked above the knees; toes four, the back toe small, unconnected.

43. *Mergus*, bill slender, a little depressed, with a crooked nail at the point, the edges of the mandible with sharp serratures; nostrils small, somewhat ovate in the middle of the bill; toes three, forward, the outer one longer, and one behind furnished with a web.

44. *Anas*, bill broad, depressed, obtuse, with a nail at the point, the mandible edged with lamellate obtuse serratures; nostrils ovate; tongue broad, obtuse, fringed on the edges near the base; toes three forwards, the middle one longer, and one behind unconnected.

45. *Pelicanus*, bill long, straight, with a hooked nail at the point; nostrils concealed in a furrow; face and gullet bare of feathers; toes four, all webbed together.

DIVISION 1. LAND BIRDS.

Order 1. Accipitres.

1. *Falco*, Falcon.

1. *Falco Chrysaetos*, Golden Eagle.—Dark brown, with ferruginous variations; bill deep blue; cere and feet yellow; legs clothed down to the toes with yellow ferruginous feathers; tail blackish, with grey undulations at the base. Length three feet, extent of wings seven feet four inches, weight twelve pounds.

The Golden Eagle is the largest and most majestic of all this tribe. Its strength is such, that it can with ease carry a lamb; and several instances are recorded of its having carried off children. Mr. Willoughby says, that in the year 1668 an eagle's nest was found in the Woodlands, near the river Derwent, in the Peak of Derbyshire. He describes the nest as being composed of large sticks, one end resting on the edge of a rock, the other on two birch trees, and covered with several layers of rushes and heath. On this nest lay one young one and an addled egg, and by them a lamb, a hare, and three heath poults. The nest was about two yards square, and unlike the nests of other birds, quite flat. The young eagle was black, of the shape of a goshawk, and almost the weight of a goose, rough footed or feathered down to the foot, having a white ring about the tail. About the year 1720, one was taken up in the parish of Glossop, upon the high mountain called Kinder-scout. This was found in a feeble state, said to be owing to the inclemency of the weather, as it afterwards recovered, and was carried about the country and shown as a natural curiosity. About seventy years ago, an eagle was seen in Hardwick park. A full-grown golden eagle was shot between Cromford and Lea wood, about six years ago, which answers in every respect to the description given by Pennant and others. This noble bird was presented to Peter Arkwright, esq. of Rock House, Cromford, who had it finely preserved.

2. *Falco Ossifragus*, Osprey or Sea Eagle.—Ferruginous brown, bill bluish horn-colour, cere and legs yellow, tail-feathers white on the inner webs, length three feet four inches, extent eight or nine feet.

The osprey or fishing eagle is nearly as large as the golden eagle. It has been twice seen in Derbyshire. On the 28th of May, 1779, one was shot at Staveley, it was in good condition, had an empty stomach, weighed 3 lbs. 11 oz. The wings extended from tip to tip five feet six inches. The legs short, but the thighs rather long; the talons semicircular and nearly of equal length; the tender sides of the feet and toes remarkably covered with horny points for the better security of its prey; the wings and talons very strong and long. The other osprey was shot at Melbourn, in 1785. They feed on fish. *Pilkington.*

Though the eagle has been so recently seen in this county, it cannot be considered in any other light than as an occasional visitor.

3. *Falco Milvus*, Kite.—Ferruginous brown, head and chin grey, with brown lines; cere and legs yellow, tail deeply forked, length twenty-seven inches, extent five feet one inch, weight 44 oz.

It flies remarkably steady, and preys much on mice. It is the best known, and the most ignoble of the falcon tribe.

4. *Falco Buteo*, The Buzzard.—Cere and feet pale yellow, beak lead colour, above ferruginous brown, beneath yellowish white, spotted with brown; tail barred with black and ash colour, and tipped with brownish white; weight 32 oz. length twenty-two inches, extent fifty-two inches. Shot at Aston some years since, and at Melbourn two years ago.

5. *Falco Æruginosus*, The Moor Buzzard.—Chocolate brown, crown and throat

yellowish or whitish, cere greenish yellow; legs long and yellow; length twenty-one inches, extent four feet three inches, weight 20 oz. Shot at Catton, in the parish of Croxall, and at Foston.

6. *Falco Palumbarius*, GOSHAWK.—Deep brown above, white with numerous transverse black lines underneath, cere yellowish green, legs yellow, over the eyes a white stripe, tail, with four or five blackish bands, length twenty-two inches or more.

7. *Falco Cyaneus*, HEN HARRIER.—*Male*, blue grey; paler underneath, cere and legs yellow, six first quill-feathers black, white at the base, slightly tipped with grey; length seventeen inches, extent three feet three inches, weight 12 oz.

Female, a ruff round the head, a white spot under each eye, back dusky, rump white, belly reddish brown, weight 16 oz. length twenty inches. They breed on the ground, and are never seen to settle on trees. Shot on the Eastmoor, and near to Derby.

8. *Falco Pygargus*, RINGTAIL.—Above, dull brown; beneath paler, with oblong rufous spots, cere and legs yellow, under the eyes a white arch, surrounding the chin; tail with dusky bands, tipt with white; length twenty inches, extent three feet, weight 20 oz. Shot on the Eastmoor, and near to Derby.

9. *Falco Tinnunculus*, KESTREL OR STANDING HAWK.—Cere and legs yellow; *male*, head light grey, with a dusky streak pointing downwards; tail the same, with a black bar near the end, tipped with white; back purplish brown, spotted with black, weight 6½ oz. length fourteen inches.

Female, back less bright, head and tail pale brown, spotted with black, weight 11 oz. Breeds in old ruins and churches. Length fourteen inches, extent two feet.

10. *Falco Nisus*, SPARROW HAWK.—Cere green yellow, feet yellow, bill blue, claws black; above brown or grey, beneath tawny white, waved with brown, tail ash colour, barred and tipped with white. They sometimes breed in old crow nests, and are very destructive to game. Male, length twelve inches, extent two feet, weight 6 oz. Female, length fifteen inches, extent two feet four inches, weight 9 oz.

11. *Falco Subbuteo*, HOBBY OR LITTLE BUZZARD.—Above bluish black; beneath pale, with oblong brown spots; throat and nape white; eyes with a white line above them and a black patch beneath, cere and legs yellow. Length twelve inches, extent two feet three inches, weight 7 oz.

One of these beautiful birds, now considered to be extinct in this island, was shot by A. N. Mosley, esq. of Park Hill, many years ago, and it being well preserved, may be seen among his valuable collection of natural curiosities.

12. *Falco Æsalon*, MERLIN.—Cere and legs yellow, bill lead colour; above purplish ash colour, with ferruginous spots; beneath yellowish white with brown spots, tail barred with brown, length twelve inches, extent twenty-five inches, weight 5½ oz.

Shot at Staveley. It is one of the smallest of the hawk species, and does not breed in England, but migrates about October.

There is perhaps a greater variety of falcons found in this county than in the same extent of country in any other part of England. This very elegant bird, next to the eagle, is the most formidable, active, and intrepid of all voracious birds, and is most esteemed for falconry, an amusement much in use amongst our ancient nobility. The late ingenious and much lamented Rev. Bache Thornhill, of Stanton, who in 1827 unfortunately was killed, while out shooting, through the accidental discharge of his friend's gun, practised, with much success, the art of falconry in this county. The falcon boldly attacks the largest of the feathered race; the stork, the heron and the crane, are easy victims; it kills hares by immediately darting upon them. The female, as in all other birds of prey, is much larger and stronger than the male, and is used in falconry to catch the kite, the heron, the crow, &c.

2. *Strix*, OWL.

1. *Strix Nyctea*, WHITE OR SNOWY OWL.—Above pale yellow, with white spots; beneath white; interior side of the quill-feathers four black spots on each side; edge of the middle claw cerated; weight 11 to 13 oz. length fourteen inches. The plumage is exquisitely pencilled with unrivalled delicacy.

This majestic and beautiful bird, contrary to the habits of the others, preys by day upon herons, hares, mice, &c. The hen was found at Staveley, sitting upon two long white eggs, larger than those of a wood pigeon.

2. *Strix Bubo*, GREAT HORNED OWL.—Approaches nearly to the size of the eagle; it is found in the most cold countries, and preys on hares and the larger species of game, &c.

One of these fine birds has been shot at Shardlow recently.

3. *Strix Brachyotus*, SHORT-EARED OWL.—Horns or ears a number of feathers, above brown, beneath pale yellow, quill-feathers barred with red, tip of the tail white; wings, when closed, reach beyond the tail: length thirteen inches.

It migrates with the woodcock; does not perch on trees, and prefers wild solitary parts,

abounding with heath, amidst which it breeds on the ground. It flies by day, and destroys many mice. Shot at Melbourn. These two species are scarce, more especially the latter. It visits us the beginning of October, and retires early in the spring. The ears being small and decumbent, are scarcely visible in dead birds.

4. *Strix Flammea*, White Screech Owl.—Head without crest; body above pale yellow, with white and grey spots; underneath white, with dusky spots: length fourteen inches; extent three feet; weight 12 oz.

It frequents old houses and uninhabited buildings. The plumage of this species has much elegance. Common.

5. *Strix Stridula*, Brown Owl.—Above, deep brown, spotted with black and white; beneath, pale ash colour, mixed with tawny black strokes; disk round the eyes, ash colour, with brown spots: length fourteen inches, extent two feet eight inches, weight 20 oz.

It flies by night, and hoots from September to November. It is a very rapacious bird, and frequently commits great depredations in pigeon-houses. It breeds in ruinous buildings and hollow trees, and in defence of its young, will attack even mankind with great courage.

6. *Strix Passerina*, Little Owl.—Head without crest; above olive brown; beneath whitish, spotted with brown; head spotted with white; quill-feathers with five rows of white spots. Length eight inches, extent twenty-one inches.

This bird is rare in this country, its resorts are among caves, rocks and ruins, and it builds its nest in the most secluded places; it lays four or five eggs, spotted with white and yellow.

3. *Lanius*, Butcher-bird.

1. *Lanius Excubitor*, Ash-coloured Shrike or Butcher-bird.—Tail wedge-form, blackish, with the sides white; head and back pale cinereous; wings blackish, with a white band; length ten inches, weight 3 oz.

This bird feeds on insects and small birds, which latter it seizes by the throat and strangles, it then fixes them on a thorn, and tears them to pieces with its bill; from this circumstance it receives its name. It has sometimes been trained by falconers to fly at small game. One shot at Derby.

2. *Lanius Collurio*, Red-backed Shrike or Lesser Butcher-bird.—Tail wedge-form, white at the edges; head and neck pale cinereous; back and wing coverts bright ferruginous. Length seven inches and a half, extent eleven inches, weight 2 oz.

This bird is not unfrequent at Duffield, it arrives towards the latter end of May, and visits the same spot for a number of years. It takes its station on the uppermost twig of a high tree, where it occasionally utters its short abrupt cry, which much resembles that of the house sparrow, but is louder and more harsh. It appears restless, frequently changing its situation; its flight is uneasy, broken and irregular, it takes three or four strokes together, very quickly, and then springs forward; by this it may easily be known in its flight. The swallows persecute it as they do other birds of prey. *O. J.*

Order 2. Picæ.

4. *Corvus*, Crow.

1. *Corvus Corax*, Raven.—Above shining black, beneath dusky, tail a little rounded, weight 3 lb. length twenty-six inches, extent four feet; builds about the middle of February and sits in March.

Raven Tor, Ashover, receives its name from a pair of these birds annually building there.

2. *Corvus Corone*, Carrion Crow.—The whole body bluish black, tail rounded, with the feathers pointed; weight 20 oz. length eighteen inches, extent twenty-six inches.

It builds the beginning of March. Crows go in pairs all the year round.

3. *Corvus Frugilegus*, Rook.—Above glossy bluish black; nostrils, chin, and sides of the mouth whitish and bare. Rather larger than the last.

They resort to their nest trees from January to February, and build about the middle of February, and again from July to October. Multitudes of these birds resort to the sea coast, in severe winters, in search of periwinkles; having found a shell, they raise it to the height of forty feet, and drop it upon the rocks, instantly descending; if the shell should not break the operation is repeated, and the labour is immense for so small a recompense. Rooks abound in the country to the great injury of corn land; although they may be serviceable, in a moderate degree, in picking worms and caterpillars out of the earth, and are frequently seen examining each furrow after the plough. When building, they are continually fighting and pulling each other's nests to pieces; these proceedings are inconsistent with living in such close community; and yet, if a pair offer to build on a single tree, the nest is plundered and demolished at once. Unhappy pairs are not permitted to finish any nests till the rest have completed their building. As soon as they get a few sticks together, a party comes and demolishes the whole. When they have finished their nests, and before they lay, the cocks

begin to feed the hens, who receive their bounty with a fondling tremulous voice and fluttering wings, and all the little blandishments that are expressed by the young while in a helpless state. This gallant deportment of the male is continued through the whole season of incubation. After the first brood of rooks are sufficiently fledged, they all leave their nest trees in the day time, and resort to some distant place in search of food, but return regularly every evening, in vast flights; where, after flying round several times, with much noise and clamour, till they are all assembled together, they take up their abode for the night.

4. *Corvus Cornix*, ROYSTON OR HOODED CROW.—Back, breast, belly and upper part of the neck ash colour, the rest bluish black; weight 22 oz. length twenty-two inches, extent three feet. Migrates, *(rare)* returns the latter end of October or early in November. One of these birds is in the collection of preserved birds at Markeaton hall.

5. *Corvus Monedula*, JACKDAW.—Back of the head, breast and belly ash colour, the rest black, irides white; weight 9 oz. length thirteen inches, extent twenty-eight inches; it frequents churches in January, and builds and breeds in the steeples.

6. *Corvus Glandarius*, JAY.—Head covered with long feathers, forehead white, with black strokes; neck black, coverts of the wings fine blue, barred with black and white; back, breast and belly purple, dashed with grey; rump white, tail black; weight 7 oz. length thirteen inches, extent twenty-one inches.

This is one of the most elegant of our British birds, and is common in this county.

7. *Corvus Pica*, MAGPIE.—Black, with a blue, green and purple gloss; scapulars, breast and upper parts of the belly white; tail long and wedge-form; weight 9 oz. length eighteen inches, extent twenty-two inches.

They build their nests with thorns, platted in a curious manner, with great art. When they have young ones, they destroy the broods of missel thrushes, though the parents are fierce, and fight boldly in defence of their nests. Magpies and starlings very often sit on the backs of sheep and deer to peck out their ticks. A magpie was shot at Markeaton about forty years ago, entirely white, except a few feathers in the tail.

5. *Cuculus*, CUCKOO.

1. *Cuculus Canorus*, CUCKOO.—Above brownish ash colour; beneath white, waved with transverse black lines; tail rounded, blackish, outer feathers spotted with white; weight 5 oz. length fourteen inches, extent twenty-five inches. Migrates.*

Zoologists have, in all languages, assigned to this harbinger of nature's fairest season, a name expressive of its singular note. Cuckoos were known in Greece in the time of the poet Hesiod. These birds are observed to rest twice annually on Malta, at times which prove them to be on their migration to and from Europe. A vulgar error prevails, that cuckoos feed entirely upon the eggs of other birds; but this I can disprove, having witnessed a curious phenomenon in nature as regards this singular bird. I accompanied an artist to Bretby in the month of July, 1828, for the purpose of taking a sketch of the beautiful mansion of the Earl of Chesterfield; while we were taking some refreshment, our attention was arrested by the noise of a young cuckoo, which was perched on the railing in front of the house. It shortly flew on the grass-plot under the window, where a grey wagtail had been for some time walking about collecting insects; as soon as the cuckoo had settled upon the grass-plot, the industrious little wagtail walked up to it and delivered what it had been collecting into its mouth; this it repeated several times, to my astonishment and gratification. I enquired how long the cuckoo had taken its station there; and Mrs. Sherwood, the housekeeper, informed me, it had been the practice of the cuckoo to receive its food from the wagtail for some time. The cuckoo visits us about the middle of April, breeds here, and leaves us again in July or August. Cuckoos lay their eggs in the nests of small birds, viz. the hedge-sparrow, titlark, wagtail, &c.; and probably the cuckoo we saw had been bred by the wagtail who fed it. *Glover.*

6. *Jynx*, WRYNECK.

Jynx Torquilla, WRYNECK OR CUCKOO'S MATE.—Above ash colour, with black and brown strokes; beneath light brown, with black spots; tail ash colour, with four black bars;

* The following curious memorandum is inserted in the seventh volume of the Transactions of the Linnæan Society.

"The cuckoo begins early in the season with the interval of a *minor third*, the bird then proceeds to a *major third*, next to a *fourth*, then a *fifth*, after which his voice breaks without attaining a *minor sixth*." This curious circumstance was observed long before the above was written, and forms the subject of an epigram in that scarce black letter book, entitled, the Epigrams of John Heywood, 1587.

"Use maketh maistry, this hath been said alway;
But all is not alway, as all men do say.
In April, the coocoo can sing her song by rote,
In June, oft time, she cannot sing a note:
At first, koo coo, koo coo sings till can she do,
At last kooke, kooke, kooke; six kookes to one koo!"

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irides hazel, weight 1¼ oz. length seven inches; migrates with the cuckoo, with whom it has great affinity in other respects. It appears in March or April.

These birds appear on the grass-plots and walks; they walk a little as well as hop, and thrust their bills into the turf in quest of ants, which are their food. They draw out their prey with their tongues, which are so long as to be curled round their heads.

7. *Picus*, Woodpecker.

1. *Picus Major*, Greater Spotted Woodpecker or French Magpie.—Variegated with black and white; crown of the head black, back part crimson; a black collar round the neck; back and rump black; cheeks and scapulars white; breast yellowish white.

The woodpecker, after it hatches its young, carries the egg shells a considerable distance from its nest, in order that they may not betray it. It is erroneously asserted to keep entirely in the woods. Shot at Staveley, Melbourn, &c.

2. *Picus Minor*, Little Spotted Woodpecker.—Crown crimson; above black, barred with white; beneath dirty white; weight 1 oz. length six inches; extent eleven inches.

In the female, the crown is white, and it is a miniature of the preceding; insomuch, that some have esteemed it a young bird of that species. *Rare.* One shot at Repton.

3. *Picus Viridis*, Green Woodpecker.—Crown scarlet and grey; back green; rump pale yellow; beneath pale green; tail tipped with black; bill lead colour, legs and feet greenish ash colour: weight 6 to 7 oz.; length thirteen inches; extent twenty inches and a half.

The cock has a tone of voice resembling the human laugh, and is generally called the English parrot. Shot at Staveley, Melbourn, Radborne, Duffield, &c. These birds make a loud cry from February to April.

8. *Alcedo*, Kingfisher.

Alcedo Ispida, Kingfisher.—Bill, upper mandible black, under yellow at the base; wings dark green, spotted with blue; scapulars and coverts of the tail bright azure, beneath orange; tail deep blue; legs and feet orange: weight 1¾ oz.; length seven inches and a half; extent eleven inches.

This bird is the halcyon of the ancients; who believed that, while the female brooded over her eggs, the sea remained smooth and tranquil. It is somewhat inelegant in shape, but its plumage is more brilliant than most of the British birds. It is frequently seen on our rivers, and preys on small fish, which it catches with great dexterity. It swallows its prey whole.

Darley, near Derby, appears to be a favourite spot for these birds, as they breed there most seasons. They nestle on the banks of rivers and brooks, in holes made by water rats. They are frequent on the Derwent and Ecclesbourne at Duffield.

9. *Sitta*, Nuthatch.

Sitta Europæa, Nuthatch or Woodcracker.—Upper mandible black, lower white at the base; above bluish grey; a black stroke across the eyes; cheeks and chin white; coverts of the wings bluish ash colour, beneath dull orange; legs pale yellow; twelve soft feathers in the tail: weight 1 oz.; length six inches; extent nine inches. *Rare.*

Shot at Romeley, near Bolsover, and Melbourn. One shot in the neighbourhood of Quorndon, December, 1820.

10. *Certhia*, Creeper.

Certhia Familiaris, Creeper.—Above brown, streaked with black and light brown; ten of the quills tipped with white; beneath white; tail of twelve long feathers: weight 5 drams; length five inches and a half; extent seven inches and a half.

The food of these birds is insects, which they find under the bark of trees. They run with facility up the smoothest tree, like a fly on a glass window. Shot at Derby.

They are frequent in the neighbourhood of Duffield. They invariably fly to the bottom of the tree, run to the far side, and immediately begin ascending in a rapid zigzag manner, with the stiff feathers of the tail closely pressed to the tree, coming half round the stock and appearing alternately on each side. When they have ascended as high as the branches, they fly to the base of another tree, which they ascend in the same manner. They never run down, but keep their heads directly upwards, and are continually pecking their food out of the crevices of the bark. *O. J.*

Order 3. Passeres.

11. *Sturnus*, Starling.

Sturnus Vulgaris, Stare or Starling.—Bill yellow; irides hazel; plumage black, tinged with green purple; tips of the feathers yellowish; legs and feet reddish black: length

eight inches and three quarters; extent fourteen inches; weight 3 oz. Congregate from September to November.

These beautiful birds usually feed on snails, worms and insects, but will eat grain, seeds and fruit. They are very common about Derby, and are frequently seen in large flocks. When attacked by hawks, or other birds of prey, they form themselves into a close compact body, which is in continual motion; thus constantly presenting a new opposing front to their adversary, in this manner they have been seen for upwards of an hour, assuming the shape and exact appearance of a balloon. *O. J.*

12. *Turdus*, Thrush.

1. *Turdus Viscivorus*, Misletoe Thrush or Thricecock.—Above brown grey; beneath yellow white, with dark spots; irides hazel; tail of twelve feathers, exteriors tipped with white; inner covert of the wings white: weight 5 oz.; length eleven inches; extent sixteen inches and a half.

This is our largest singing bird, it builds often in orchards, and propagates the misletoe; sings in January, and pairs the latter end of February; while breeding it is fierce and pugnacious, driving such birds as approach its nest with great fury to a distance. He suffers no magpie, jay or blackbird, to enter the garden where he haunts, and is for the time a good guard to the new-sown legumens. The misletoe thrush, though most shy and wild in the autumn and winter, in the season of nidification is comparatively tame. Migrates in October or November. These birds do not destroy the fruit in gardens, like the other species of turdi, but feed on the berries of misletoe, and in the spring on ivy berries, which then begin to ripen. In the summer, when their young become fledged, they leave neighbourhoods and retire to sheep-walks and wild commons.

2. *Turdus Musicus*, Throstle or Song Thrush.—Above brown; beneath yellowish white, with blackish arrow-shaped spots; quill-feathers ferruginous on the inner base; length nine inches; extent thirteen inches and a half; weight 3 oz. Begins to sing early in January.

3. *Turdus Ericetorum*, Heath Thrush.—Above brown; beneath yellowish white, with blackish arrow-shaped spots; across the eyes a blackish stripe; size of the last, but heavier.

Found sometimes with the redwings, in winter, at Duffield.

4. *Turdus Iliacus*, Redwing.—Above brown grey; beneath whitish, with brown spots; sides and under covert of the wings red yellow; a yellow white line athwart the eyes: weight 2¼ oz.

This bird suffers much in frosty weather. Like the fieldfare, it visits us in the winter; and in the spring returns to its native haunts in Sweden, Norway, Russia, &c.

5. *Turdus Pilaris*, Fieldfare.—Bill yellowish, tipped with black; head and rump ash colour; back deep brown; tail and legs black; beneath white; breast reddish, with dark spots: weight 4 oz.; length ten inches; extent seventeen inches.

This bird does not breed in England, but migrates here in October or November; it feeds on haws, and nestles in the fields at night, where it roosts. They congregate in vast flocks.

6. *Turdus Merula*, Blackbird.—Plumage black; bill and edges of the eyelids yellow: weight 4 oz.; length ten inches. Begins to whistle about the middle of January and lays in March.

7. *Turdus Torquatus*, Ring Ouzel.—Black; breast with a white patch extending towards the neck; about the size of the blackbird.

In autumn these birds feed on haws and yew berries, and in the spring on ivy berries. They breed in the Peak of Derbyshire, and are called there Tor ouzels. They withdraw in October or November, and return in spring about March or April.

8. *Turdus Cinctus*, Water Ouzel, Water Crow or Water Pyot.—Blackish brown; cheeks, throat and breast white; upper parts of the belly reddish brown; lower part and tail blackish. Length above seven inches; extent eleven inches; weight 2½ oz.

This bird is found on the Derwent at Matlock, and sometimes at Duffield. It delights in the most solitary places, and particularly the falls or cascades of the water; and what is most remarkable, it is capable of walking under water, at the bottom of the river, the same as on dry land.

9. *Turdus Roseus*, Rose-coloured Ouzel.—Head slightly crested behind; body pale rose-colour; head, neck, wings and tail glossy black: length eight inches.

One of these rare and beautiful birds was shot at Weston, in October, 1784, by the Rev. Mr. Dawson.

13. *Ampelis*, Chatterer.

Ampelis Garrulus, Waxen Chatterer.—Head slightly crested behind; body reddish grey; back and wings dusky; throat and tail black; secondary quill-feathers with a mem-

braneous vermilion tip; tail black, tipped with yellow: length eight inches; about the size of a starling.

Several of these birds were shot in January, 1829, in the neighbourhood of Derby. They are rarely seen in any part of England, and only visit us at uncertain periods. They have likewise been shot at Glapwell, Smalley and Melbourn.

14. *Loxia*, Crossbill.

1. *Loxia Curvirostra*, Crossbill.—Bill, mandibles crossing each other; body variegated with orange, red, yellow and green; wings and forked tail dusky; head, neck, breast, sides and rump red; belly dirty yellowish grey. There is a great diversity of colour in these birds; in some the red predominates, in others the orange, &c. Female, dull olive green, where the male is red; wings and tail brown, under parts yellowish: length six inches and three quarters; extent eleven inches and a quarter; weight nearly 2 oz.

The general appearance of these birds is not pleasing, notwithstanding their gay colours; their short thick body, strong neck, large head, and very strong bill, give them a heavy clumsy appearance. Several of these birds were shot at Duffield and Chevin in October, 1821; they came in large flocks, and fed chiefly on the berries of the quicken (*sorbus aucuparia*) and several more were shot at the same places in the winter of 1828. *O. J.*

2. *Loxia Coccothraustes*, Grosbeak or Hawfinch.—Bill remarkably strong and large, dull flesh colour; underneath the body purplish grey; legs flesh colour; head chestnut; chin and quills black; the end of the middle quills curved outwards; a black line from the bill to the eyes; back brown: weight 2 oz.; length seven inches; extent thirteen inches.

Grosbeaks feed principally on hard seeds, which their strong bills enable them easily to open. They also feed on hawthorn and yew berries. With their large horny beaks they crack and break the shells of stone-fruits, for the sake of the kernels. They are regular inhabitants of Switzerland and Germany. Birds of this sort are seldom seen in England, and only in the hardest winters.

One of these birds was shot at Duffield, November 29, 1822; and two, which were shot out of a flock at Osmaston, are now preserved at the Navigation Inn there.

3. *Loxia Chloris*, Greenfinch or Green Linnet.—Plumage yellow green; exterior webs of the outermost feathers of the tail yellow; lower part of the belly greenish white: length five inches and a half; weight 1 oz.

The green linnet sings in March and April, and flocks in November; common.

4. *Loxia Pyrrhula*, Bulfinch.—Bill, crown, covert of the wings and tail black; back of the neck and back grey; coverts of the tail and vent white; cheeks, breast and belly red; a white line across the wings. *Female*, dirty brown; breast and belly dirty buff colour; crown black; rump white: length six inches.

Frequent in the neighbourhood of Duffield.

15. *Emberiza*, Bunting.

1. *Emberiza Miliaria*, Bunting.—Above olive brown, with black spots; beneath yellowish white, with oblong dusky spots; edges of the wings and legs yellow; sides of the tail whitish: length seven inches and a half; extent eleven inches; weight 2 oz.

Buntings are seed birds, and have a tooth-like process in the upper mandible, which enables them to split their food with great facility.

2. *Emberiza Citrinella*, Yellowhammer.—Crown, chin, throat and belly yellow; back of the neck, less wing coverts, part of the quills and part of the tail green; breast orange; rump brown red: length six inches; extent ten inches; weight 7 drams.

Sings in the month of February, and later in the year than any other bird.

3. *Emberiza Schæniculus*, Reed Sparrow.—Above black, edged with red; beneath whitish; a white circle round the head of the male: length nearly six inches; weight 5½ drams. Female, head rufous, with dusky streaks, without the white circle round it; brownish beneath.

These birds are frequently found on the Ecclesbourne and Derwent at Duffield, where they breed and remain all winter.

16. *Fringilla*, Finch.

1. *Fringilla Domestica*, House Sparrow.—Body black and grey; a white mark behind the eyes; wings and tail brown, the former with a single white band: length about six inches; weight nearly 7 drams.

Begins to chirp about the middle of January.

2. *Fringilla Montana*, Tree Sparrow.—Back of the neck, under the eyes and belly white; rest of the body brown and black; legs pale red. Less than the house sparrow.

Female, without the black on the head. Breeds in the neighbourhood of Duffield. *O. J.*

3. *Fringilla Cœlebs*, CHAFFINCH OR PIED FINCH.—Bill, crown, back and sides of the neck bluish grey; forehead, wings and tail black; three white lines across the wings; above the eyes, cheeks and throat red; belly reddish white; female without the grey on the head and neck; throat and neck dullish white: less than the sparrow; sings in January and February.

Seen in equal numbers, male and female, the beginning of January.

4. *Fringilla Montifringilla*, BRAMBLING OR BRAMBLE FINCH.—Back and crown black, edged with brown; chin, throat, breast, and less wing coverts orange; inner coverts yellow; quills edged with yellow; belly whitish: length six inches.

The male is a bird of great beauty. They breed in Scandinavia, and a few migrate here in winter; appear in March, and is last seen in October. They have been shot at Staveley and Melbourn. A hawk was shot at Weston Underwood, with a bird on which it had just pounced; and which, on examination, proved to be a brambling.

5. *Fringilla Carduelis*, GOLDFINCH, THISTLE-FINCH, PROUD TAILOR OR SEVEN-COLOURED LINNET.—Circle round the bill red; breast, back and rump brown; middle of the wings yellow; tip of the bill, line to the eyes, crown, wings and tail black; the rest white: length five inches and a half; extent nine inches and a half.

This is the most elegant of our small birds, in form, plumage and nidification. Sings in February and March. It also resumes its song in the autumn. Young broods appear about the middle of August.

6. *Fringilla Linota*, COMMON LINNET OR GORSE LINNET.—Chestnut brown; beneath yellowish brown; wings with a longitudinal white band; tail feathers dusky, with white edges: length six inches; extent about ten inches.

These birds congregate early in January.

7. *Fringilla Cannabina*, GREATER RED-HEADED LINNET.—Back, scapulars and coverts red brown; on the forehead a dark red spot; breast pale red; rest black and white: length six inches; extent nearly ten inches; weight 5 drams.

8. *Fringilla Linaria*, LESSER REDPOLE, RED-HEADED LINNET OR FRENCH LINNET.—Above rufous brown, with dusky spots; chin black; front and breast red; wings with a double white band: length five inches; extent seven inches and a half; weight 2½ drams.

These birds are not uncommon about Derby. In winter they appear in large flocks, and frequent the alder trees on the banks of the Derwent and Ecclesbourne. Their appearance and manners are very pleasing.

9. *Fringilla Spina*, SISKIN OR ABERDUVINE.—Greenish yellow, with dusky spots; quill feathers yellow in the middle, the first four without spots; tail feathers yellow at the base, tipped with black: length four inches and three quarters.

These beautiful little birds frequent the same places as the last; they appear in great flights in the winter, but at uncertain periods, as several winters elapse without one of them being seen. They feed on the alder seed, make a small chirping noise something like the goldfinch, and do not appear timid.

17. *Muscicapa*, FLYCATCHER.

Muscicapa Grisola, SPOTTED FLYCATCHER.—Bill, legs and feet black; above brownish grey; beneath white; quills edged with yellow; throat and sides tinged with red; mouth yellow: length five inches and a half; builds in the corners of walls or on the end of beams, and lays five eggs. Migrates. Appears about the middle of April, breeds with us, and retires in August.

Birds of this genus are perhaps more universally dispersed over every part of the globe than any other. They frequent gardens, and feed chiefly on flies and insects; which, but for the multitudes consumed by them, would render some countries unfit for human residence. They are, of all our summer birds, the most mute and the most familiar; they do not make the least pretension to song, but use a wailing note when they think their young in danger.

18. *Alauda*, LARK.

1. *Alauda Arvensis*, SKY LARK OR GROUND LARK.—Lower mandible, spot above the eyes, soles of the feet and under side of the body yellowish; head and breast spotted with black; exterior web of the quills edged with white: weight 1½ oz.; length seven inches; extent thirteen inches.

Sings flying or soaring in the air.

2. *Alauda Pratensis*, TIT LARK.—Bill, spots on the head, breast and back black; above greenish brown; breast yellow; throat, belly and vent white; two outermost tail feathers white on the outer webs; over the eyes a palish streak: length five inches and a half; extent nine inches; weight nearly 5 drams.

3. *Alauda Arborea*, WOOD LARK.—A yellowish white ring round the head; crown, throat,

and back reddish brown, spotted with black; breast tinged with red; belly white; tail black, edged with white: length six inches; extent thirteen inches; weight 8 drams.

Sings in the night, or early in the morning, soaring in the air.

4. *Alauda Trivialis*, PIPIT LARK.—Above dull olive brown, with dusky spots; beneath pale ferruginous, with dusky spots; outermost tail feathers white for more than half their length; secondaries at the tip: length six inches and a half; weight 5½ drams.

Nothing can be more amusing than the whisper of this little bird, which seems to be close by, though at one hundred yards distance; and when close to your ear, is scarcely any louder than when a great way off. Its note is like that of the *locusta*, whispering in the bushes. It is a most artful creature, skulking in the thickest part of a bush; and will sing at a yard distant, provided it be concealed. It begins its note in April.

19. *Motacilla*, WAGTAIL.

1. *Motacilla Alba*, WHITE WAGTAIL.—Bill, mouth, head, neck, back, tail and legs black; breast, belly and sides of the tail white; tail and back claw very long: weight 6 drams; length seven inches and a half. Chirps in January.

Found at all times of the year, but mostly in spring.

2. *Motacilla Boarula*, GREY WAGTAIL.—Above dark grey; beneath buff yellow; vent and rump pale yellow; outermost tail feathers entirely white; secondaries on the inner webs: length nearly eight inches; extent ten inches; weight about 5 drams.

This bird is not so common as either of the other species. It remains with us all winter.

3. *Motacilla Flava*, YELLOW WAGTAIL.—Above olive green; beneath yellow; a yellow line above the eyes; tail edged with white: length seven inches; weight about 5 drams.

This is a most elegant bird, and is not unfrequent.

20. *Sylvia*, WARBLER.

1. *Sylvia Luscina*, NIGHTINGALE.—Head and back reddish brown; tail deep tawny red; beneath pale ash colour; vent whitish; irides hazel; eyes large; legs deep ash colour: weight 6 drams; length seven inches; extent ten inches.

One was heard in the summer of 1828, in Normanton lane, near Derby. The following description of the varied song of this unrivalled bird, is taken from the ingenious author of the *Histoire des Oiseaux*: "The leader of the vernal chorus begins with a low and timid voice, and he prepares for the hymn to nature by essaying his powers and attuning his organs; by degrees the sound opens and swells; it bursts with loud and vivid flashes, it flows with smooth volubility, it faints and murmurs, it shakes with rapid and violent articulations; the soft breathings of love and joy are poured from its inmost soul, and every heart beats unison and melts with delicious languor. But this continued richness might satiate the ear; the strains are at times relieved by pauses, which bestow dignity and elevation. The mild silence of evening heightens the general effect, and not a rival interrupts the solemn scene." Nightingales begin to build in May.*

2. *Sylvia Modularis*, HEDGE SPARROW.—Head deep brown and ash colour; back and tail blackish; throat and breast bluish ash colour; belly dirty white; legs reddish: weight six drams; length five inches and a half; extent nine inches.

Sings early in January; as soon as frosty mornings come they make a very plaintive piping noise. In breeding time they have a remarkable flirt with their wings.

3. *Sylvia Phœnicurus*, REDSTART.—Bill, cheeks, throat and legs black; forehead white;

* The *jug, jug, jug*, so frequent in the song of the nightingale, has afforded an opportunity for the imitative poetry in the following verses:

"Ah, love, love, love!—ah, what is love but woe?
Love, love, so beautiful, yet so unbless'd!
Love, love, so cherish'd—love, so sad a foe!
Like thee, fair maid!—alas, fair maid, like thee,
The trembling joy, the painful bliss I know—
Love's fearful hope, love's anxious ecstasie;
The momentary trust, the long, long, dread;
Desire of being—terror still to be—
The pang surviving, and the rapture dead;
The constant form, the lost reality!
Yet raise, fair JULIA, raise thy drooping head.
Love, love, love, love, in this sweet summer-night,
Lo, from yon silv'ry western star doth spread
(His mother's star, which with suspended light,
Rests on the waters where the sun-beams set;)
His wings, as he is wont, with pearls bedight,
As pure as dew on flowers, as tears that wet
Thy wan, wan, cheeks, so mournful and so white!
And lo, lo, lo! he bends his bow of jet,
That bow so wished for by the broken heart;
Those reuniting, who in love have met,
In death, death, death! no more, no more, to part."

crown, neck and back blue grey; breast, rump and tail brownish red: weight 4 drams; length six inches; extent nine inches and a half.

These are birds of passage; they arrive here in April, and are only seen in the spring and summer months. When they shake their tails they move them horizontally. The song of the redstart is superior, though somewhat like that of the whitethroat. Sitting very placidly on the top of a tall tree in a village, the cock sings from morning to night; he affects neighbourhoods, and loves to build in orchards and about houses. He begins to sing about the middle of April, and continues until the middle of June. His note is short and imperfect.

4. *Sylvia Sylvicola*, WOOD WREN.—Yellow green; throat and cheeks yellow; belly and vent pure white; from the bill, over the eyes, a bright brimstone streak: length five inches and a quarter; weight 3 drams.

Found in gardens, orchards, &c. and arrives here about the beginning of April.

5. *Sylvia Hippolais*, LESSER PETTICHAPS.—Above greenish brown; throat dirty yellowish white; breast and belly silvery white; above and below the eyes a yellowish streak; quill and tail feathers dusky, with a dirty yellow margin: length five inches; extent six inches; weight nearly 3 drams.

This pretty little bird frequents woods and plantations; its manners are gentle, and its general note well known: being merely like the words *chiff chaff, chiff chaff*, slowly and distinctly repeated, and seems to make solitude more lonely. It is a migratory bird, and appears in this neighbourhood about the latter end of March. *O. J.*

6. *Sylvia Regula*, GOLDEN-CRESTED WREN.—Greenish; beneath dirty white; crown orange; secondary quill feathers yellow on the outer margin, white in the middle: length three inches and a half; extent five inches; weight 76 grains.

Its crown glitters like burnished gold. It frequents the gardens at Park Hill, near Egginton, and has been shot at Derby, Romely wood, near Bolsover, Melbourn, Duffield, and other places. Sings from the middle of March to the end of April. It is the smallest British bird, and often hangs like the titmouse, with its back downwards.

7. *Sylvia Sylviella*, LESSER WHITETHROAT.—Head and rump grey; back, wings and tail grey brown; beneath white; two middle tail feathers shorter and subulate: length five inches and a quarter; weight 3¼ drams.

This bird arrives about the same time as the whitethroat, which it very much resembles in plumage, but is considerably less, and more gentle in its manners. In building its nest it generally chooses a bush of the bird rose *(rosa arvensis)* in which it builds an extremely slight nest of the stems of hairiff *(galuim aparine)* in which it deposits four or five almost transparent white eggs, spotted with brown, but much less than those of the common whitethroat. *O. J.*

8. *Sylvia Salicaria*, SEDGE WARBLER.—Yellowish brown, with dusky spots; beneath dirty white; tail coverts pale tawny; over the eyes a white stripe. About the size of a blackcap.

This is likewise a migratory bird, arriving about the latter end of April; it frequents rivers and marshy places. It builds in bushes near the water side, and during the time the female is sitting, the male takes up his station on some bush near (generally a willow hanging over the water) and sings incessantly night and day. It imitates by turns the note of the skylark, the sparrow, the wagtail, the swallow, and the call of the blackbird. If any danger approach, he warns his mate by a low note at first, but as he comes nearer, his warnings are redoubled, till at last they become loud and shrill, and she leaves her nest. It is pleasant to stand at midnight, after a fine summer's day, to listen to this bird pouring forth its wild and varied song, which contrasts finely with the dull hoarse croakings of the numerous corncreaks which frequent the valley. All else is silence, and the notes of these birds seem to add to the calm solemnity of the scene.

9. *Sylvia Rubecula*, ROBIN REDBREAST.—Bill and legs blackish; forehead, chin, throat and breast orange red; above green ash colour; belly white: weight half an ounce; length six inches; extent nine inches.

Redbreasts sing all through the spring, summer and autumn. The reason they are called autumn songsters is, because in the two first seasons their voices are drowned in the general chorus; in the latter their song becomes distinguishable. It was formerly held impious to destroy this species or the common wren; notwithstanding the prejudices in their favour, they do much mischief in gardens to summer fruits; they eat also the berries of the ivy, honeysuckle and spindle-tree. The redbreast attends the gardener when digging his borders, and will, with great familiarity and tameness, pick out the worms almost close to the spade.

10. *Sylvia Œnanthe*, WHEAT EAR.—A black and a white line across the face; head and back ash colour, tinged with red; beneath yellowish white; bill, mouth, quills and half the tail black; other half and rump white: weight 1 oz.; length six inches; extent twelve inches. Migrates.

These birds, though they are taken in great numbers in Sussex, are never seen to flock; a great many breed in the Peak every summer. Most probably the maintenance of this bird

arises from the *aurelia* of the *lepidoptera*, which furnish them with a plentiful table in the wilderness. Found on Chevin and Breadsall moor.

11. *Sylvia Trochilus*, WILLOW WREN.—Greenish yellow brown; beneath white, tinged with yellow; over the eyes a yellowish stripe; wing coverts yellow: length five inches; weight nearly 3 drams.

It makes its appearance the latter end of March or early in April, breeds in May, and is last seen in October. It haunts the tops of trees, and makes a sibilous noise. It is a very diminutive bird.

12. *Sylvia Troglodytes*, WREN.—Reddish brown, crossed with obscure dusky lines; throat and breast paler; over the eyes a pale reddish white stripe: length above four inches; extent six inches and a half; weight nearly 3 drams.

It is of a sprightly nature, is perpetually in action, and flirting up its tail; it is often observed to sing in its flight. Sings the latter end of January.

13. *Sylvia Rubetra*, WHINCHAT.—Above red brown, with black spots; beneath reddish yellow; a white streak above the eyes, and a broad black one under them; tail black and white; wings with two black spots; bill, mouth and legs black: weight 4½ drams; length five inches; extent nine inches.

This bird, like the wheatear and several others of this genus, is migratory.

14. *Sylvia Rubicola*, STONECHAT.—Bill, mouth, head, neck, back, tail and legs black, mixed with brown; sides of the throat and rump white; beneath reddish yellow; wings with white spots: length five inches and a half; extent nine inches; weight ½ oz.

These birds are seen on the stone walls throughout the hilly parts of the county, where they breed, and continue the winter through.

15. *Sylvia Cinerea*, WHITETHROAT.—Above brown ash colour; beneath white, tinged with red; tail edged with white: length six inches; weight 4 drams; extent nine inches.

The note of this bird, which is continually repeated, and often attended with odd gesticulations, is harsh and displeasing; they sing with an erected crest, assume attitudes of rivalry and defiance, and seem to be of a pugnacious disposition; they are shy and wild in breeding time, haunting lonely lanes and commons, but in July and August they bring their broods into gardens and orchards, and make great havoc amongst the insects: migrates. The whitethroat appears about the middle of April, and continues during the summer months.

16. *Sylvia Atricopilla*, BLACKCAP.—Crown black; body, above grey greenish brown; beneath cinereous; *female*, crown chestnut; body inclining to olive: length six inches; extent ten inches; weight ½ oz.

The blackcap has commonly a full, sweet, deep, loud and wild pipe: yet that strain is of short continuance, and his motions are desultory: but when the bird sits calmly, and engages in song in earnest, he pours forth very sweet but inward melody; and expresses great variety of soft and gentle modulations; superior, perhaps, to those of any of our warblers, the nightingale excepted. These birds haunt orchards and gardens; while they warble, their throats are wonderfully distended.

21. *Parus*, TITMOUSE.

1. *Parus Major*, GREATER TITMOUSE.—Bill, head and throat black; back olive green; beneath green yellow; rump bluish; quills tipped with blue and white; tail edged with white; legs lead colour: builds its nest in holes of trees, and lays eighteen or twenty eggs at one hatch: length six inches; extent nine inches; weight 10 drams. Sings in January and February.

It frequents houses in severe weather; and in deep snows will draw straws out of thatched buildings, in order to pull out the flies that are concealed between them.

2. *Parus Ater*, COLE TITMOUSE.—Bill and head black, with a white spot behind; above green grey; beneath white; wing coverts tipped with white; legs bluish: weight 2 drams; length four inches; extent seven inches.

Frequently found in the neighbourhood of Duffield, &c.

3. *Parus Palustris*, MARSH TITMOUSE.—Head black; cheeks white; above rusty grey; beneath white; legs lead colour: weight 2½ drams; length 4½ inches; extent eight inches.

All the above resort at times to buildings, particularly in hard weather; they carry away barley and oat straws from the sides of ricks; they will pick holes in apples that are left upon the ground, and are well entertained with the seeds of the sunflower.

4. *Parus Cæruleus*, BLUE TITMOUSE.—Brown; wings and tail blue; forehead and cheeks white; across the eyes, and on the sides of the neck a black stripe; back yellow green; beneath yellow: weight 3 drams; length four inches and a half; extent seven inches.

This bird is a great frequenter of houses, and a general devourer. Besides insects, it is very fond of flesh, and frequently picks bones on dunghills. They are fond of the brains of other birds, which they get at by cleaving the skull of such as they find dead.

It is an extremely entertaining bird in captivity: but dangerous to introduce into an aviary, on account of its cruelty and boldness.

5. *Parus Caudatus*, LONG-TAILED TITMOUSE.—Purplish; with a broad black band down the back; beneath pale rose colour; crown white, surrounded by a black band, passing through the eyes. Tail longer than the body. Length nearly six inches; extent nearly seven inches; weight about 2 drams.

The nest of this bird is very beautiful and arched over, with the entrance on one side. This delicate bird, which is almost as minute as the golden-crested wren, spends its whole time in the woods and fields, never retreating for succour in the severest seasons to houses and neighbourhoods. These birds fly in flocks in the winter, and seem to proceed entirely in one direction.

22. *Hirundo*, SWALLOW.

1. *Hirundo Rustica*, CHIMNEY SWALLOW.—Above purplish black; beneath reddish white; a red spot on the forehead and under the chin; mouth black: length seven inches; weight 6 drams; extent twelve inches. Migrates.

It is first seen about the fifteenth of April, about lakes and mill ponds. In general this *hirundo* builds in chimneys; and loves to haunt those stacks where there is a constant fire, no doubt for the sake of warmth; it disregards the perpetual smoke of the tunnel, and begins to build its nest five or six feet down the chimney, about the middle of May: which consists, like that of the house-martin, of a crust or shell, composed of dirt or mud, mixed with short pieces of straw, to render it tough and permanent; this nest is like a deep dish, open at the top and lined with fine grasses and feathers, which are often collected as they float in the air. The female lays from four to six white eggs, dotted with red specks; and brings out her first brood about the last week in June, or the first in July. The progressive method by which the young are introduced into life is very amusing; first, they emerge from the shaft with difficulty, and often fall down into the rooms below; for a day or two they are fed on the chimney top, and then are conducted to the dead leafless bough of a tree: where, sitting in a row, they are attended with great assiduity, and may then be called *perchers*. In a day or two more they become *fliers*, but are still unable to take their own food; they therefore play about near the place where the dams are hawking for flies; and, when a mouthful is collected, at a certain signal given, the dam and the nestling advance, rising towards each other, and meeting at an angle; the young one all the while uttering such a little quick note of gratitude and complacency, that a person must have paid very little regard to the wonders of nature, that has not often remarked this feat.*

The female betakes herself immediately to the business of a second brood as soon as she is disengaged from her first: which at once associates with the first broods of *house-martins*; and with them congregates, clustering on sunny roofs, towers and trees. This *hirundo* brings out her second brood towards the middle or latter end of August.

All the summer long the swallow is a most instructive pattern of unwearied industry and affection; for, from morning to night, while there is a family to be supported, she spends her time in skimming about, and exerting the most sudden turns and quick evolutions. Avenues and long walks, under hedges, pasture fields, and mown meadows, where cattle graze, are her delight: especially if there are trees interspersed: because in such spots insects most abound. When a fly is taken, a smart snap from her bill is heard, resembling the noise at the shutting of a watch case: but the motion of the mandibles is too quick for the eye to perceive.

The swallow, probably the male, is the *excubitor* to house-martins and other small birds, announcing the approach of birds of prey. For as soon as a hawk appears, with a shrill alarming note he calls all the swallows and martins about him; who pursue in a body, and buffet and strike their enemy till they have driven him from the village; darting down from above on his back, and rising in a perpendicular line in perfect security. This bird will also sound the alarm, and strike at cats when they climb on the roofs of houses, or otherwise approach the nests. Each species of hirundo drinks as it flies along, sipping the surface of

* Concerning swallows, Mr. White and Mr. Barrington were in favour of their torpidity, and against their migration. The ancients generally mention this bird as wintering in Africa. The Rhodians had a festival called *Chelidonia*, when the boys brought about young swallows; the song which they sang may be seen in the works of Meursius:

> "He comes! he comes! who loves to bear
> Soft sunny hours, and seasons fair;
> The swallow hither comes to rest
> His sable wing, and snowy breast."

From a passage in the works of Aristophanes, we learn that among the Greeks, the *crane* pointed out the time of sowing; the arrival of the *kite*, the time of sheep-shearing; and the *swallow*, the time to put on summer clothes. According to the Greek calendar of Flora, kept by Theophrastus at Athens, the Ornithian winds blow, and the swallow comes, between the 28th of February and the 12th of March; the kite and nightingale appear between the 11th and 26th of March; the cuckoo appears at the same time the young figs come out, whence its name. *See Stillingfleet's Tracts on Natural History*, page 321.

the water; but the swallow alone in general washes on the wing, by dropping into the water a many times together; in very hot weather, house and sand martins dip and wash a little.

The swallow is a delicate songster, and in soft sunny weather sings both perching and flying; on trees and on chimney tops in a kind of concert; he is also a bold flier, ranging to distant towns and commons even in windy weather, which the other species seem much to dislike. Horsemen on wide downs are often closely attended by a little party of swallows for miles together, which play before and behind them, sweeping around and collecting all the skulking insects that are aroused by the trampling of the horses' feet; when the wind blows hard, without this expedient, they are often forced to settle to pick up their lurking prey. Before they depart, for some weeks, they to a bird, forsake houses and chimneys and roost in trees; and usually withdraw about the beginning of October.

Both male and female are distinguished from their congeners by the length and forkedness of their tails. They are undoubtedly the most nimble of all the species; and when the male pursues the female in amorous chase, they then go beyond their usual speed, and exert a rapidity almost too quick for the eye to follow. They do not always build in chimneys, but often in barns and out-houses, against the rafters.

2. *Hirundo Urbica*, MARTIN.—Head and back purple black; breast, belly and rump white; feet covered with white down; mouth yellow: length five inches and a half; extent ten inches; weight 5 drams. Migrate; appear about the middle of April.

For some time after these birds appear, the hirundines in general pay little attention to the business of nidification, but play and sport about. About the middle of May, the martin begins to provide a mansion for its family.

3. *Hirundo Riparia*, SAND MARTIN.—Above mouse-colour; beneath white; feet black; a mouse-coloured ring round the neck: length five inches; extent ten inches.

They will penetrate several feet into the banks of sand-pits to deposit their eggs, the shells of which are white, and beautifully pellucid.

4. *Hirundo Apus*, SWIFT.—Toes all placed forwards; above and underneath sooty black; chin whitish: length nearly eight inches; extent seventeen inches; weight 1 oz.

This bird arrives the latest of the genus, and departs the earliest; it flies abroad in the morning and evening. Owing to the length of its wings, should it by accident alight on the ground, it finds great difficulty in rising. It builds in holes under the eaves of houses; and does not build a mud nest like the swallow and house-martin.

The time of arrival of the Swallows at Duffield, for the last eight years, is as follows:

1821, April 12 (*Hirundo Rustica*) two swallows seen in a thunder storm.
May 6 (*Hirundo Apus*) a swift seen.
1822, April 13 (*Hirundo Rustica*) a pair of swallows seen, weather tempestuous, wind east.
April 25 (*Hirundo Riparia*) a sand-martin seen.
April 28 (*Hirundo Apus*) a swift seen.
1823, April 11 (*Hirundo Rustica*) seven swallows seen, day fine and calm.
April 29 (*Hirundo Apus* and *Hirundo Rustica*) a swift and house-martin seen; a sand-martin arrived some time before.
1824, April 17 (*Hirundo Rustica*) several swallows seen.
1825, April 8, four of some species of *Hirundo*, apparently sand-martins seen, wind south-east.
April 10 (*Hirundo Rustica*) two swallows seen.
1825, April 29 (*Hirundo Apus*) three or four swifts seen.
1826, April 9, three or four some species of swallows seen, day stormy, wind south or south-west.
April 13 (*Hirundo Rustica*) several swallows seen.
Nov. 5 (*Hirundo Rustica*) A swallow seen, flying as in the middle of summer, near Duffield bridge.
1827, April 7 (*Hirundo Rustica*) several swallows seen.
April 15 (*Hirundo Riparia*) a sand-martin seen.
1828, April 9 (*Hirundo Rustica*) a swallow seen in the midst of a storm of thunder, rain and hail, wind south.
April 16 (*Hirundo Urbica*) a house-martin seen.
April 21 (*Hirundo Riparia*) several sand-martins seen. *O. Jewitt.*

23. *Caprimulgus*, GOATSUCKER.

Caprimulgus Europæus, GOATSUCKER OR FERN OWL.—Plumage black, white, brown and ash colour intermixed; mouth purple; irides hazel; weight 2½ oz.; length ten inches.

It has whiskers like a cat: and nature has provided it with combs on its feet, which are fixed on the hindermost toe: with these it combs out its whiskers. One of these rare birds was shot, some years ago, in the park of Sir George Crewe, bart. There was also one killed on Sinfin moor, on the 18th of September, 1780. It migrates, and is found here from May to September. Their mouths are of an extraordinary size, opening far beyond their eyes, which enable them to take large insects on the wing. They seldom appear in the day-time, except when disturbed, or in dark cloudy weather; they begin their song at the close of day, and at times in the night; the noise resembles the whizzing of a spinning-wheel; and when near, gives a sensible vibration to the human frame; but it is difficult to discover whence the sound is emitted. This bird is a natural ventriloquist: has wonderful powers of wing, and may be termed the night swallow. They lay two eggs, which they deposit on

the ground; their unfledged young squat amongst heath, and resemble a toad. This bird is nearly the size of the cuckoo. Yearly frequents Little Eaton moor and the neighbourhood of Duffield, where several have been shot.

Order 4. Columbæ.

24. *Columba*, Dove.

1. *Columba Œnas*, Stock Dove.—Pale bluish ash-colour; neck and breast with a green and copper gloss; lower part of the back whitish; wings with two black bands; tail tipped with black: length nearly fourteen inches; extent twenty-two; weight 11 oz.
Frequents the meadows below Duffield in large flocks in the winter.

2. *Columba Palumbus*, Ring Dove.—Deep bluish ash; each side the neck a glossy white patch; angles of the wings and outer quill-feathers edged with white; tail black at the end: length nearly eighteen inches; extent thirty inches; weight 20 oz.
Not unfrequent.

Order 5. Gallinæ.

This Order includes the Domestic Poultry: which are so universally known, that a scientific description of them is thought to be unnecessary; however, as we cannot with propriety entirely overlook them, we shall give a few observations, and go into further particulars as regards their management, in the next Chapter, on Agriculture.

Phasianus Gallus, Cock.

Of all other birds the cock seems to have been first reclaimed from the forest, and taken to supply the accidental failure of the luxuries or necessities of life. No animal has greater courage than the cock when opposed to one of his own species; and in every part of the world, where refinement and polished manners have not taken place, the brutal diversion of cock fighting is a favourite sport. The hen, when well kept, will lay two hundred eggs in the course of a year. She seldom clutches a brood of chickens above once a season, which she defends and provides for with kindness and assiduity. She sits early in the month of February. Poultry pick much grass: they are sold at from 2*s.* 6*d.* to 3*s.* 6*d.* per couple in Derby market.

Pavo Cristatus, Peacock.

The distinguishing character of this beautiful bird is the train, which rises just above the tail all up the back; the tail serves as the fulcrum to prop the train, which is long and top-heavy; when erected, nothing appears of the bird before but its head and neck: and the train forms a fan of the most resplendent hue. By a strong muscular vibration, this bird can make the shafts of its long feathers clatter like the swords of the sword-dancers; it then tramples very quick with its feet, and runs backwards towards the females.

Meleagris Gallopavo, Turkey.

Turkeys were first introduced into England from North America, in the reign of Henry the Eighth, and began to form an article in our Christmas feasts about the year 1585. The female commences laying about the 15th of March and continues to the latter end of April, and lays eighteen or twenty eggs; and such is her perseverance in the duty of incubation, that she will often perish with hunger, rather than leave her nest. She treats her young with great affection. Turkey cocks strut and gobble. Turkeys, though corn-fed, delight in a variety of plants, such as cabbage, lettuce, &c. A turkey that weighs from 14 to 16 lbs. sells in Derby market from 6*s.* 6*d.* to 8*s.* 6*d.*

Numidia Meleagris, Guinea Fowl.

This bird, originally a native of Africa, has long been naturalized in this county. All its habits resemble those of the poultry kind. In our climate the females are not so prolific as in their native regions. Their eggs are considered very rich, and their flesh a delicacy. Among the Romans they were in great request for the table.

25. *Phasianus*, Pheasant.

Phasianus Colchicus, Pheasant.—Bill horn colour; cheek membrane bright red speckled with black; a tuft of black feathers near the ears; head and neck blue, tinged with a rich green and purple gloss, beneath brown; tail of eighteen feathers, long and of various colours; legs with a short sharp spur: weight 2¾ to 3 lbs.; length thirty-six inches; extent two feet eight inches.
The male crows in March. The female lays from eighteen to twenty eggs in a season; she hatches and brings up her brood with care and vigilance, so that its fecundity is sufficient

to stock the forest; a beautiful plumage adorns this bird; and its flesh acquires a higher and more delicious flavour from its unlimited freedom. This bird is said to have been originally brought to Europe from the banks of the Phasis, in Asia Minor, and to have been artificially propagated in this country. But, notwithstanding the coldness of our climate, and its tender constitution, it has multiplied in a wild state; and, disdaining the haunts of man, has left him to take shelter in the thickest woods and the remotest forests. In chasteness and pure elegance of colouring, there is, perhaps, no bird which surpasses the pheasant, or, indeed, equals it. These beautiful birds are very plentiful on many of the noblemen and gentlemen's estates in this county. They are bred in considerable numbers in the woods in Wingerworth, where buck-wheat is sown for them. In Bretby park the berries of a grove of elder-trees are reserved for them.

26. *Tetrao*, Grouse.

1. *Tetrao Urogallus*, Wood Grouse or Cock of the Wood.—Bare spot above the eyes rufous brown; head and neck cinereous; chin and belly blackish; axils of the wings white; scarlet legs feathered to the feet: weight from 12 to 13 lbs.

The male of this noble species of game is nearly as large as the turkey: the female is considerably smaller. This bird is chiefly found in mountainous and wooded situations. He feeds upon the cones of the pine, cranberries, ants' eggs and insects; and his gizzard, like that of domestic fowls, contains a quantity of gravel, which assists its powers of digestion. The female lays six or seven eggs, which are white and marked with yellow; and while sitting she is so remarkably tame and tranquil, that it is not easy to force her from her nest. The wood grouse begins early to feel the genial influence of spring; and, during his courtship, he may be seen upon the large branches of the pine-tree; his tail expanded like a fan, his wings drooping, his neck stretched out, &c.; at this period he seems insensible to danger, and this is the time sportsmen generally take to shoot him. They are now considered to be extinct in this country.

2. *Tetrao Tetrix*, Black Game or Heath Cock.—Plumage black, a white spot on the shoulders; white tail of sixteen feathers, forked; thighs and legs dark brown: weight nearly 4 lbs.; length twenty-two inches; extent two feet nine inches. *Female*, plumage mixed with red.

These birds feed on whortleberries, but in summer and autumn wander into corn-fields. They are polygamous. About fifty years ago one was shot on Egginton heath. It has recently been shot on Morley moor. Formerly these birds appeared in great numbers in the Peak, but now they are not common in this county.

3. *Tetrao Scoticus*, Red Grouse or Moor Game.—Bill black; irides hazel; over the eyes a naked fringed membrane; a white spot on each side the lower mandible; throat red; head and neck tawny red, mixed with black; back red, with black spots; beneath purplish brown, streaked with dark lines; tail of sixteen feathers; thighs pale red, legs feathered to the claws: weight 29 oz.; length sixteen inches: female, belly spotted with white; weight 15 oz.

These birds prefer the summits of hills, braving the utmost rigour of winter, and never seek shelter in woods. When other food fails, they will devour the tops of heath. They are found in great plenty on the moors belonging to the Duke of Devonshire, the Duke of Norfolk, and on the estates of other noblemen and gentlemen in this county: they are seen in the greatest number on a foggy morning.

27. *Perdix*, Partridge.

1. *Perdix Cinerea*, Partridge.—Bill brown; behind the eyes a naked red skin; plumage orange, black and brown, sometimes brown and ash elegantly mixed with black; a semilunar mark on the breast; tail of ten feathers: weight 15 oz.; length thirteen inches: female, less.

The female makes her nest of dry leaves and grass upon the ground, and lays from sixteen to twenty eggs. The young birds run as soon as they are hatched, frequently with a part of the shell sticking to their backs. The old birds pair about the middle of February, and their affection for their young is peculiarly strong and lively; they lead them out in common, call them together, point out to them their proper food, and sit close by each other, frequently covering their young with their wings, like the hen. It is not uncommon to see an old partridge feign itself wounded and run along on the ground, fluttering and crying before either dog or man, to draw them away from its helpless young ones. Several remarkable instances of their solicitude to save their brood are recorded by sportsmen. When a kite hovers over a covey of young partridges, the old birds fly up at the bird of prey, screaming and fighting with all their might to protect their young. These birds feed on ants' eggs, insects, all kinds of grain and young plants; they frequently feed on the green leaves of turnips, which gives a peculiar flavour to their flesh.

2. *Perdix Coturnix*, Quail.—Bill dusky; head ferruginous, spotted with black; a yellowish line from the crown to the back; chin and throat whitish; breast pale orange spotted with black; back black and yellow; tail of twelve feathers, black and reddish: about half the weight of the partridge, and exactly of the same form; length seven inches and a half; extent fourteen inches.

The female makes her nest like the partridge, and lays six or seven eggs, of a grey colour

speckled with brown, which she hatches in three weeks. Quails are birds of passage, and are universal throughout Europe, Asia and Africa. In the autumn they are seen in immense flocks traversing the Mediterranean sea from Europe to the shores of Africa, and returning again in the spring, frequently in such numbers as to cover many of the islands in the Archipelago. It is said that one hundred thousand have been taken in one day in the space of four miles. Some remain in England all the year, and only shift their quarters in the winter. These birds are seldom seen, though their calls are heard most seasons in corn-fields in June and July.

28. *Otis*, Bustard.

Otis Œdicnemus, Thick-kneed Bustard or Stone Curlew.—Pale reddish brown, with dusky spots; chin, belly and vent white, with a few dusky streaks; two primary quill-feathers black, with a white bar in the middle: length eighteen inches; extent thirty-six inches; weight 18 oz.

This bird breeds on the Derbyshire moors, where its principal food is earth-worms. It migrates in the winter and returns early in the spring. It is seldom seen in the day. "In the evening it comes out in quest of food, and may then be heard at a great distance: its cry is singular, resembling a hoarse kind of whistle, three or four times repeated, and has been compared to the turning of a rusty handle."

DIVISION 2. WATER BIRDS.

"On the birds that enliven the water:—Wild-ducks in spring-time hatch their young in the islands, and upon reedy shores;—the sand-piper, flitting along the stony margins, by its restless note attracts the eye to motions as restless:—upon some jutting rock, or at the edge of a smooth meadow, the stately heron may be descried with folded wings, that might seem to have caught their delicate hue from the blue waters, by the side of which she watches for her sustenance. In winter the lakes are sometimes resorted to by wild swans; and in that season habitually by widgeons, goldings and other aquatic fowl of the smaller species. Let me be allowed the aid of verse to describe the evolutions which these visitants sometimes perform, on a fine day towards the close of winter:

> "Mark how the feather'd tenants of the flood,
> With grace of motion that might scarcely seem
> Inferior to angelical, prolong
> Their curious pastime! shaping in mid air
> (And sometimes with ambitious wing that soars
> High as the level of the mountain tops)
> A circuit ampler than the lake beneath,
> Their own domain;—but ever, while intent
> On tracing and re-tracing that large round,
> Their jubilant activity evolves
> Hundreds of curves and circlets, to and fro,
> Upward and downward, progress intricate
> Yet unperplex'd, as if one spirit swayed
> Their indefatigable flight.—'Tis done—
> Ten times, or more, I fancied it had ceased;
> But lo! the vanish'd company again
> Ascending;—they approach—I hear their wings
> Faint, faint, at first, and then an eager sound
> Past in a moment—and as faint again!
> They tempt the sun to sport amid their plumes;
> They tempt the water or the gleaming ice,
> To show them a fair image;—'tis themselves,
> Their own fair forms, upon the glimmering plain,
> Painted more soft and fair as they descend
> Almost to touch;—then up again aloft,
> Up with a sally and a flash of speed,
> As if they scorn'd both resting-place and rest!"
>
> *Wordsworth's Lake Scenery.*

Order 6. Grallæ.

29. *Ardea*, Heron.

1. *Ardea Grus*, Crane.—Body cinereous; hind head bare of feathers, warty; crown, fore-part of the neck and quills black; from the pinion of the wings a tuft of loose, lacerated curled feathers: length five feet or more; weight about 10 lbs.

Rarely found in the county.

2. *Ardea Stellaris*, Bittern.—Hind head scarcely crested; above pale yellow brick colour, with transverse black spots; beneath paler, with oblong ones: length two feet six inches; weight 22 oz.

Formerly found at Melbourn and other parts of the county, but now very rare.

3. *Ardea Cinerea*, HERON.—Hind head with a black pendant crest; body cinereous; neck with a black line underneath; breast with a black band. *Female*, hind head smooth black; back bluish, beneath whitish; breast with oblong black spots: length three feet two inches; extent five feet four inches; weight 3½ lbs.

This bird is not unfrequent; it has been shot in various parts of the county.

30. *Numenius*, CURLEW.

Numenius Arquata, CURLEW.—Bill six inches long, and arched; plumage greyish white, spotted with black; quills black; tail white, barred with black; legs bluish grey: weight from 22 to 37 oz.; length two feet; extent three feet three inches.

Found sometimes, though rarely, in the county.

31. *Scolopax*, SNIPE.

1. *Scolopax Rusticola*, WOODCOCK.—Bill three inches and a half long; body, above variegated with red brown, black and grey; beneath dirty white, with transparent black lines; chin yellowish: weight 13 oz.; length fourteen inches; extent twenty-six inches.

These birds are common in every part, but more especially in the north-west extremity of the county. During the summer months, they inhabit and breed in Norway, Sweden, Lapland, and other countries in the north; but on commencement of the frost, they begin to migrate southward. A few birds reach us in October, but the main body does not arrive till November. The greater part leaves us again at the end of February or the beginning of March.

2. *Scolopax Gallinago*, SNIPE.—Bill three inches long, flattish and rough at the tip; body, above blackish and reddish brown; four brown longitudinal lines on the head; throat, breast and belly white; neck red and brown; scapulars black and yellow; tail tipped with white; legs pale green: weight 4 oz.; length twelve inches; extent eighteen inches.

Snipes are migratory birds, and are supposed to breed chiefly in the lower lands of Germany and Switzerland. They visit us in October or November, and retire in the spring. Many remain the whole year, and make their nests of dried grass and feathers, in the most inaccessible parts of marshes. They make a piping noise in April.

3. *Scolopax Gallinula*, JACK SNIPE.—Bill tubercled; above variegated with a green and purple gloss; from the shoulder to the tail two deep buff stripes; lores brown; legs greenish: length eight inches and a half; extent fifteen inches.

Frequent in the county.

4. *Scolopax Ægocephala*, GODWIT.—Bill very slightly bending upwards; body grey, more or less tinged with pale ferruginous, with dusky spots; belly and vent white; tail with dusky bars: length about sixteen inches; weight 12 oz. or more.

This bird is not often seen in this county; several, however, have been shot at different times, on Sinfin moor, on the moors in the Peak, and at Barlborough.

5. *Scolopax Calidris*, REDSHANK OR WHISTLING PLOVER.—Bill two inches, red at the base, black at the tip; head, back of the neck and scapulars dusky ash colour, spotted with black; back and under-side of the body white; legs orange: weight 6 oz.; length twelve inches; extent twenty-two inches.

The note of this species is shrill, resembling the human whistle, and may be heard half a mile. They appear in November. Shot at Staveley.

32. *Tringa*, SANDPIPER.

1. *Tringa Pugnax*, RUFF AND REEVE.—Bill and legs yellow buff; face covered with yellow pimples; wing coverts grey brown; middle tail-feathers barred with black, the three outer ones plain grey brown: length about one foot; extent of wings nearly two feet.

These birds are rare in this county; they were found formerly on Sinfin moor.

2. *Tringa Vanellus*, LAPWING OR PEWIT.—Bill, crown, crest and throat black; a black line under each eye; back purplish green; wings and tail black and white; legs red: weight 8 oz.; length thirteen inches; extent thirty inches.

They have great powers of flight, and dart with great celerity; during nidification they show great anxiety; and to divert the attention of a man or a dog approaching their nest, will fly so near as almost to come in contact. Their chief food is worms; the female lays four or five eggs, olive-coloured and spotted with black, on the dry ground. She sits about three weeks; the young are covered with a thick down, and are able to run in two or three days after they are hatched. The parent displays the fondest attachment to them, and employs innumerable interesting stratagems to avert approaching danger. They may sometimes be seen in large flocks on marshy lands or newly ploughed fields in search of worms. They are named from their particular cry, and remain with us the whole year. Lapwings are found in most parts of Europe, as far northward as Iceland. In winter they are met with in Persia and Egypt.

3. *Tringa Hypoleucos*, COMMON SANDPIPER.—Bill, head and quills brown; neck dark ash colour; back brown, mixed with green, with transverse dusky lines; longitudinal black lines on the head; a white stroke above each eye, beneath white; legs greenish: length seven inches and a half; extent thirteen inches; weight 2 oz.

Shot at Sinfen moor and Tideswell. Frequents the Derwent at Duffield, regularly appearing in March and leaving in September. It is likewise found on the Wye at Buxton.

4. *Tringa Macularia*, SPOTTED SANDPIPER.—Base of the bill and legs reddish; body spotted above and beneath; over the eyes a white stripe; wings with two white bars: length nearly eight inches; extent fourteen inches; the size of a thrush.

5. *Tringa Alpina*, DUNLIN.—Bill and legs dusky ferruginous, with dusky spots; breast and belly with blackish blotches; tail-feathers grey, edged with white: length eight inches; extent fifteen inches; weight 1½ oz. Has been shot at Staveley.

6. *Tringa Canutus*, KNOT.—Above grey, with dusky grey spots; beneath white, with dark spots; rump white, with dusky crescents; primary quill-feathers serrate; outmost tail-feathers whitish immaculate: length nine inches; extent twenty inches; weight 4½ oz.

Formerly found on Sinfin moor.

33. *Charadrius*, PLOVER.

1. *Charadrius Pluvialis*, GOLDEN PLOVER.—Blackish, with yellowish green spots; front, belly and vent white; legs blackish: length above ten inches; extent twenty-four inches; weight 9 oz. Shot formerly on Sinfen moor.

2. *Charadrius Calidris*, SANDERLING OR CURWILLET.—Bill and legs blackish; lores and rump greyish; head and back grey, with slight dusky streaks; front and body beneath white, immaculate: length eight inches; extent fifteen inches; weight nearly 2 oz.

Shot at Staveley.

3. *Charadrius Hiaticula*, RINGED PLOVER.—Grey brown; beneath white; crown crossed by a black band; neck with a white collar, beneath which is a broad black one; legs orange: length seven or eight inches; extent sixteen inches; weight nearly 2 oz.

Shot at Derby, February, 1786.

4. *Charadrius Morinellus*, DOTTEREL.—Breast dull orange, over which is a white band, and above that a black one; across the eyes a white stripe; legs blackish: length nearly ten inches; extent eighteen inches; weight about 4 oz.

These birds frequent the hills of the Peak in flocks, in April, May and June, where they are frequently taken or shot, and are considered excellent eating.

34. *Hæmatopus*, OYSTER-CATCHER.

Hæmatopus Ostralegus, SEA-PIE OR PIED OYSTER-CATCHER.—Body, above black, beneath white; throat black, with or without a white crescent across it; breast and belly white; wings crossed with a white band; rump and upper half of the tail white; bill three inches long, orange; iris crimson; under the eyes a small white spot; legs orange; claws black: length sixteen inches; extent two feet seven inches; weight 16½ oz. Shot at Derby.

35. *Rallus*, WATER RAIL.

Rallus Aquaticus, WATER RAIL.—Bill slightly arched, slender; above black; beneath orange; above, feathers dusky, edged with olive brown; flanks with transverse black and white spots; beneath the wings ash colour; base of the wings white; tail short; legs reddish and near the tail: weight 5 oz.; length twelve inches; extent sixteen inches. *Rare.* One shot on the Derwent at Duffield, a few years since.

36. *Gallinula*, GALLINULE.

1. *Gallinula Chloropus*, WATER HEN OR MOOR HEN.—Front fulvous; garters red; body blackish; outer edge of the wings and vent white: length fourteen inches; extent twenty-two inches; weight about 15 oz. Common on the rivers and ponds.

2. *Gallinula Crex*, CORN CRAKE OR LAND RAIL.—Rufous brown, with blackish spots; beneath pale yellowish brown; wings reddish bay; bill and legs grey brown; flanks, with a few transverse brown streaks: length nine inches and a half; weight 6 to 8 oz.

These elegant birds are very generally dispersed. They are rather abundant in the valley of the Derwent at Duffield, eight or ten being frequently heard at one time at night, and it is curious to notice the differences in their voices. But though so many inhabit the fields, they are very rarely seen, it being almost impossible to make them rise; they may, however, be lured very near, by imitating their note with a pocket comb and case, even till they are seen within a yard or two. Their shape and swift manner of running, are admirably

adapted for making their way through the grass, which they do without any motion being perceived among the stems. *O. J.*

Order 7. Pinnatipedes.

37. *Phalaropus*, Phalarope.

Phalaropus Lobatus, Grey Phalarope or Scollop-toed Sandpiper.—Bluish grey, with dusky spots; beneath white; head white; wing coverts and tail feathers blackish, with whitish margins: weight 1 oz.

This is one of the rarest of British birds: one is mentioned in Bewick, as having been shot at Staveley, in this county.

38. *Fulica*, Coot.

Fulica Atra, Bald Coot.—Front white or reddish; body blackish; beneath dusky grey; wings edged with white; garters yellow: length sixteen inches; extent thirty inches; weight 24 to 28 oz. Found occasionally on the Trent and Derwent.

39. *Podiceps*, Grebe.

1. *Podiceps Minor*, Lesser Grebe or Dipper.—Reddish brown; breast and belly silvery white, mottled with grey; cheeks pale ferruginous; fore-part of the neck grey; lowest part of the rump, and spot on the wings, silvery white: length ten inches; extent seventeen inches; weight 6 or 7 oz.

The motions of this bird in the water are lively and elegant, but on land its gait is slow and awkward. Like the rest of the grebes, having no tail, it is obliged to walk upright, which gives it a grotesque appearance. It is found on the Trent and Derwent, where it is frequently shot in the winter. On the least appearance of danger, it disappears under the water and dives to the side, where its bill alone appears above, and prevents it from being discovered.

2. *Podiceps Cristatus*, Greater Crested Grebe.—*Adult bird:* dusky brown; beneath white; head rufous, enlarged with a crest; collar black; inner quills white. *Two years' old bird:* cheeks and throat with a bright tawny pendant ruff. *Young bird:* head smooth; wings with a white spot: length twenty-three inches; extent thirty-three inches; weight between 2 and 3 lbs. Found sometimes on the Trent.

3. *Podiceps Auritus*, Lesser Crested Grebe or Eared Grebe.—Blackish brown; breast and belly white; ears with an orange tuft; sides dull ferruginous: length twelve inches; extent twenty-two inches. Found in the same places as the last.

Order 8. Palmipedes.

40. *Colymbus*, Diver.

1. *Colymbus Glacialis*, Great Northern Diver.—Head and neck violet black; back and wings spotted with white; throat and hind part of the neck with a white crescent: length three feet five inches; extent four feet eight inches; weight 12 or 14 lbs.

One shot at Darley, near Derby, in December, 1826.

2. *Colymbus Stellatus*, Speckled Diver.—Dusky, with oval white spots; beneath white; head and fore-part of the neck speckled with grey; feathers at the sides fringed with greyish white: length twenty-seven inches; extent three feet nine inches; weight nearly 4 lbs.

41. *Sterna*, Tern.

1. *Sterna Hirundo*, Common Tern or Sea Swallow.—Bill and legs red; crown and front black; tail forked; outmost feathers black on the outmost webs: length fourteen inches; extent thirty inches; weight about 4 oz. One shot at Duffield, January 6, 1827.

2. *Sterna Minuta*, Lesser Tern.—Bill and legs yellowish red; crown black, front white; from the bill to the eyes a black stripe; tail forked, the outermost feathers all white: length eight inches and a half; extent nearly twenty inches; weight 2 oz.

3. *Sterna Fissipes*, Black Tern.—Black; back and wings grey; vent white; tail slightly forked: length ten inches; extent twenty-four inches; weight nearly 3 oz. The two latter birds have been shot on Sinfen moor.

42. *Larus*, Gull.

1. *Larus Ridibundus*, Black-headed Pewit or Black-capped Gull.—Whitish; head black; bill and legs purplish red: length fifteen inches; extent thirty-seven inches; weight about 10 oz. Visits this county occasionally.

2. *Larus Marinus*, Black-backed or Black and White Gull.—White; back and wings dusky lead colour; primary quills black, with broad white tips: length two feet four inches; extent five feet eight inches; weight nearly 5 lbs. Found as the last.

3. *Larus Canus*, Common Gull or Sea Mew.—White; back and wings grey; first quills black at the extremity, fourth and fifth with a black spot at the tip, outermost black on the outer web: length eighteen inches; extent three feet eight inches; weight about 1 lb.
Seen occasionally in various parts of the county.

4. *Larus Tridactylus or Rissa*, Kittiwake.—White; back and wings grey; outmost quills black on the outer web; tail white; hind-toe a mere knob: length fifteen inches; extent three feet; weight 7 or 8 oz.
Shot at Chellaston and Bretby. One found dead by the side of the Derwent at Duffield, September 2, 1819. It appeared to have been starved to death, its stomach containing nothing but a few fragments of shells.

43. *Mergus*, Merganser.

1. *Mergus Merganser*, Goosander.—Slightly crested, white; head, upper part of the neck, back and quills glossy black; tail grey: length two feet four inches; extent three feet; weight 4 lbs. Shot on the Trent, near Twyford, Catton, &c.

2. *Mergus Castor*, Dun Diver.—Crested grey; head and upper part of the neck ferruginous; chin, ends of the middle quill-feathers and belly white: length two feet three inches; extent two feet eleven inches; weight nearly 3 lbs. Found in the same places as the last.

3. *Mergus Minutus*, Red-headed Smew.—Head and upper part of the neck ferruginous; bill black; above grey brown; beneath and chin white; wings with a white spot before and behind. *Female*, bill lead colour; breast clouded with grey; back dusky, mixed with grey: length fifteen inches and a half; extent two feet; weight 14 or 15 oz.
Has been shot at Derby and Staveley.

44. *Anas*, Duck.

1. *Anas Cygnus*, Wild Swan.—Bill semi-cylindrical, black; cere yellow; body pure white: length four feet ten inches; extent seven feet three inches; weight from 13 to 16 lbs.
Sometimes visits Derbyshire in severe winters.

2. *Anas Olor*, Tame Swan.—Bill red, black at the nail and sides, with a black fleshy tubercle at the base; body pure white; much larger than the last; plumage cinereous till the second year; legs dusky; ribs twelve.
Many of these beautiful birds are found on the Trent, where they remain unmolested, and add greatly to the beauty of the river.

3. *Anas Niger Olor*, Black Swan.—Bill rich scarlet, near the tip a small black spot, edged with white; whole plumage intense black, except the primary and secondary quill-feathers, which are white; eyes black; feet dusky: length four feet two inches; extent five feet six inches.
This bird is a native of New South Wales. One was shot on the river Trent, opposite Weston Cliff, on the 2nd of July, 1821, by Mr. Joseph Bowmer of Melbourn, gamekeeper to Sir William Rumbold, bart.: who had, within the three preceding years, shot likewise a white snipe, a white sparrow, a white swallow, a white Jackdaw, and an osprey eagle.

4. *Anas Anser*, Grey lag Goose.—Bill semi-cylindrical, flesh colour, with a white nail; body, above grey, beneath paler, mixed with grey; neck striated longitudinally: length two feet nine inches; extent five feet; weight 8 or 9 lbs. Frequents the rivers, occasionally in the winter. Breeds in March.

5. *Anas Albifrons*, White-fronted Goose.—Bill flesh colour, with a white nail; body grey, mixed with brown and white; front white: length two feet four inches; extent four feet six inches; weight 4 to 5 lbs. This bird is found on the Trent in severe seasons.

6. *Anas Erythropus*, Bernacle Goose.—Bill black, with a flesh coloured spot on each side; body grey; undulate above, with black and white; neck black; face and belly white: length twenty-five inches; extent four feet five inches; weight 5 lbs. Shot at Barlbrough.

7. *Anas Bernicla*, Brent Goose.—Bill, head, neck and breast black; a white crescent on each side the neck: length twenty-eight inches; extent four feet; weight 2½ lbs.
Formerly shot on Sinfen moor.

8. *Anas Boschas*, WILD DUCK OR MALLARD.—Bill straight, yellowish green; head and neck glossy green, with a white collar beneath; breast purplish chestnut; wing spot purple blue, above which is a black and white band; middle tail feathers of the male recurved: length twenty-three inches; extent thirty-five inches; weight 2½ lbs. This bird is not unfrequent on the rivers and ponds in the winter. The female sometimes hatches her young the latter end of March.

9. *Anas Tadorna*, SHELDRAKE.—Bill turned upwards, red, with a knob at the base; head greenish black; breast, with an orange bay band, crossed by a brownish stripe running down the belly; wing spot glossy copper green: length two feet; extent three feet six inches; weight 2 lbs. 10 oz. Found formerly on Sinfen moor.

10. *Anas Penelope*, WIDGEON.—Bill lead colour, tipped with black; head bay, spotted with black; front yellowish white; back with grey and blackish undulate lines; vent black. *Female* brown, with darker spots; breast paler: length twenty inches; extent twenty-seven inches; weight nearly 24 oz. Shot on the Trent and Derwent.

11. *Anas Ferina*, POCHARD.—Bill blue, tipped with black; body with grey and black undulate lines; head chestnut; pectoral band, rump and vent black: length nineteen inches; extent thirty inches; weight 28 oz. Found in the same places as the last.

12. *Anas Glacialis*, LONG-TAILED DUCK.—Bill black, orange in the middle; body black; beneath white; front and sides of the head reddish grey; two middle tail feathers very long, narrow and pointed. *Young bird:* body white; temples, breast, back and wings black. *Female:* blackish, varied with rufous and grey; back black; collar and lower part of the belly white: length twenty-two inches; extent twenty-nine inches.

Pilkington mentions this bird as having been shot on Sinfen moor, but that tract being now enclosed and drained, it is principally found on the Trent and Derwent.

13. *Anas Clangula*, GOLDEN EYE.—Bill black; body varied with black and white; head tumid, black with a green and violet gloss; at the corners of the mouth a white spot: length eighteen inches; extent two feet six inches; weight 2 lbs.

Not unfrequent on the Trent, and sometimes on the Derwent.

14. *Anas Glaucion*, MORILLON.—Bill yellowish brown; body blackish, with white lines; head dull ferruginous; neck with a white collar, and a grey one beneath it; wings with a white line: length fifteen inches; extent two feet two inches; weight 1 lb. 3 oz.

One of these birds was shot out of a small flock, on the Derwent at Duffield, January 11, 1823. It is not a common bird, as this is the only instance known of its having been shot here. *O. J.*

15. *Anas Querquedula*, GARGANEY.—Bill black; over the eyes a broad white stripe; breast with semi-circular brown and black lines; wing spot green: length seventeen inches; extent twenty-eight inches. Formerly found on Sinfen moor.

16. *Anas Crecca*, TEAL.—Bill black; above and beneath the eyes a white line; breast with roundish black spots; wing spot green: length fifteen inches; extent twenty-three inches; weight 12 oz. Found on the Trent and Derwent.

45. *Pelicanus*, PELICAN.

1. *Pelicanus Carbo*, CORVORANT OR CORMORANT.—Bill toothless, black; head slightly crested; chin dirty white; body black; tail rounded, of fourteen feathers: length three feet four inches; extent nearly five feet; weight nearly 8 lbs.

Sometimes, though rarely, seen in the county.

2. *Pelicanus Bassanus*, GANNET OR SOLAND GOOSE.—Bill serrate, yellowish white; face bald, blue; body dirty white; primary quills black: length three feet; extent six feet; weight about 7 lbs.

In the foregoing list, it has been thought best to give a description of every species of bird which has *at any time* been found in this county, as far as they could be collected. Enclosures, drainings and improvements, have undoubtedly thinned their numbers: but still, Derbyshire, from the great diversity of its surface and climate, may boast of as great a variety of this beautiful part of the creation, as any inland county in the kingdom.

The following is a list of the summer birds of passage, and the time in which they usually appear, arranged somewhat in order.

1. *Wryneck*, the middle of March, harsh note
2. *Smallest Willow Wren*, the latter end of March, chirps till September
3. *Swallow*, the middle of April
4. *Martin*, the middle of April
5. *Sand Martin*, the middle of April
6. *Blackcap*, the middle of April, a sweet wild note
7. *Nightingale*, the beginning of April
8. *Cuckoo*, the middle of April
9. *Largest Willow Wren*, the middle of April, a sweet plaintive note
10. *Whitethroat*, the middle of April, a mean note, sings on till September
11. *Redstart*, the middle of April, a more agreeable song

12. *Stone Curlew*, the end of March, loud nocturnal whistle
13. *Grasshopper Lark*, the middle of April, a small sibilant note till the end of July
14. *Swift*, the latter end of April
15. *Sedge Warbler*, the latter end of April, a sweet polyglot, but hurrying; it has the notes of many birds
16. *Land Rail*, the latter end of April, a loud harsh note; crake, crake
17. *Goat-sucker or Fern Owl*, the beginning of May, it chatters by night, with a singular noise
18. *Flycatcher*, the beginning of May, a very mute bird; this is the latest summer bird of passage.

This assemblage of curious and amusing birds, belongs to ten several genera of the Linnæan system.

Most soft-billed birds live on insects, and not on grain and seeds: and therefore, at the end of summer they retire; but the following soft-billed birds, though insect eaters, stay with us the whole year:

Redbreast and *Wren*, these frequent houses, and haunt out-buildings in the winter; eat spiders
Hedge Sparrow, haunt sinks for crumbs and other sweepings
White Wagtail,
Yellow Wagtail,
Grey Wagtail,
The three last frequent shallow rivulets, near the spring heads, where they never freeze; eat the aureliæ of Phryganea.
Stone-chatter
Golden-crested Wren, this is the smallest British bird, haunts the tops of tall trees.

The following is a list of the winter birds of passage, and the time in which they usually appear, arranged somewhat in order.

1. *Ring Ousel*, Michaelmas and March, breeds in the Peak
2. *Red-wing*, about old Michaelmas
3. *Fieldfare*, about old Michaelmas; though a percher by day, it roosts on the ground at night
4. *Royston Crow*, about old Michaelmas; most frequent on downs
5. *Woodcock*, about old Michaelmas
6. *Snipe*, about old Michaelmas; some snipes constantly breed with us
7. *Jack Snipe*, about old Michaelmas
8. *Wood Pigeon*, it seldom appears till late; and not in such plenty as formerly
9. *Wild Swan*, on some large waters
10. *Wild Goose*,
11. *Wild Duck*,
12. *Pochard*,
13. *Widgeon*,
14. *Teal*,

} on our lakes and rivers

15. *Grosbeak*,
16. *Cross-bill*,

} these are only wanderers, that appear occasionally, and are not observant of any regular migration.

17. *Silk-tail*,

These birds, as they stand numerically, belong to the following *Linnæan* genera. 1, 2, 3, *Turdus*. 4, *Corvus*. 5, 6, 7, *Scolopax*. 8, *Columba*. 9, 10, 11, 12, 13, 14, *Anas*. 15, 16, *Loxia*. 17, *Ampelis*.

Birds that sing in the night are but few, viz.

Nightingale, In shadiest covert hid. *Milton.*
Woodlark, Suspended in mid air.
Sedge Warbler, among reeds and willows.

Birds that continue in full song till after midsummer, arranged somewhat in the order in which they first begin to open as the spring advances.

1. *Woodlark*, in January, and continues to sing through all the summer and autumn
2. *Song Thrush*, in February and on to August; reassume their song in autumn
3. *Wren*, all the year, hard frost excepted
4. *Redbreast*, all the year, hard frost excepted
5. *Hedge Sparrow*, early in February to July the 10th
6. *Yellow-hammer*, early in February until August the 21st
7. *Skylark*, in February and on to October
8. *Swallow*, from April to September
9. *Blackcap*, beginning of April to July the 13th
10. *Titlark*, from the middle of April to the middle of July
11. *Blackbird*, sometimes in February and March, until the end of July; reassumes in autumn
12. *White-throat*, in April to the end of July
13. *Sedge Warbler*, from May to the beginning of July
14. *Common Linnet*, breeds and whistles on till August; reassumes its note when they begin to congregate in October; and again, early before the flocks separate.

Birds that cease to be in full song, and are usually silent at or before midsummer:

15. *Redstart*, May to the middle of June
16. *Chaffinch*, February to the beginning of June
17. *Nightingale*, April to the middle of June.

Birds that sing for a short time, and very early in the spring:

18. *Missel-bird*, January. It is called, in some counties, the *Storm-cock*, because its song is supposed to forebode windy wet weather; is the largest singing bird we have
19. *Great Titmouse*, in February, March and April; reassumes for a short time in September.

Birds that have somewhat of a note or song, and yet are hardly to be called singing birds:

20. *Golden-crested Wren*, its note is as minute as its person, frequents the tops of high oaks and firs; the smallest British bird
21. *Marsh Titmouse*, haunts large woods; two harsh sharp notes
22. *Small Willow Wren*, sings in March, and on to September
23. *Largest Willow Wren*, sings from the end of April to August
24. *Grasshopper Lark*, chirps all night from the middle of April to the end of July
25. *Marten*, all the breeding time, from May to September
26. *Bullfinch*, } from the end of January to July.
27. *Bunting*, }

All singing birds, and those that have any pretensions to song, come under the *Linnæan ordo of passeres.*

Birds that sing as they fly are but few, viz.:

Skylark, rising, suspended, and falling
Titlark, in its descent, sitting on trees, and walking on the ground
Woodlark, suspended; in hot summer nights all night long
Cuckoo
Blackbird, sometimes from bush to bush
White-throat, uses, when singing on the wing, odd jerks and gesticulations
Swallow, in soft sunny weather
Wren, sometimes from bush to bush.

Birds that breed earliest in these parts:

Raven, hatches in February and March. A singular circumstance, connected with the ornithology of this county, has occurred in the parish of Ashover; on the cliff adjoining Overton park is a rock, called, as long as any person living can recollect, Raven's Nest Tor; two ravens have constantly built their nest in this rock, and although it is taken every year, an apparatus having been fixed for many years to the rock for that purpose, yet the ravens constantly build in the same place
Song Thrush, } hatches in March
Blackbird, }
Rook, builds the beginning of March
Woodlark, hatches in April
Ring-dove, lays the beginning of April
Missel Thrush, builds in February or March.

All birds that continue in full song till after midsummer, are supposed to breed more than once.

FISH.

"Let me live harmlessly, and near the brink
Of Trent or Avon have a dwelling-place;
Where I may see my quill, or cork, down sink
With eager bite of perch, or bleak, or dace;
And on the world and my Creator think:
Whilst some men strive ill-gotten goods t' embrace;
And others spend their time in base excess
Of wine, or worse, in war and wantonness."

ALL the Derbyshire rivers, and some of the brooks, abound with fish of various sorts; as, pike, trout, grayling, perch, roach, chub, barbel, dace, eels, &c.; in the Trent and Derwent are sometimes caught large salmon; and in the Trent, sturgeon.

Wonderful as it may appear to see creatures existing in a medium so dense, that men, beasts, and birds must inevitably perish in it; yet experience proves, that, besides those species which we are in the daily habit of seeing, the very depths of the immense ocean contain myriads of animated beings, to whose very form we are almost strangers, and of whose dispositions and manners we are still more ignorant. In their construction, modes of life, and general design, the watery tribes are perhaps still more astonishing than the inhabitants of either the land or air.

The structure of fish, and their adaptation to the element in which they are to live, are eminent proofs of divine wisdom. Most of them have the same external form, sharp at each end and swelling in the middle, by which configuration they are enabled to traverse their native element with ease and swiftness.

The fins of fish are denominated from their situations. The *pectoral fins* are placed at a little distance behind the opening of the gills, and are large and strong, and serve as well to balance the body as to assist the motion of the fish. The *ventral fins* are placed towards the lower part of the body, under the belly, and serve chiefly to raise or depress the fish in the

water. The *dorsal fins* are situated on the ridge of the back, and are very large in flat fish; their use, like the pectoral ones, is to keep the body in equilibrio, as well as to contribute to its progressive motion. The *anal fins* are placed between the vent and the tail, enabling the fish to keep an upright position.

Fish possess all the necessary organs of seeing, hearing, smelling and feeling in an equal degree with either quadrupeds or birds. Voracity is their chief characteristic. Those with the largest mouth pursue almost every thing that has life; and often meeting each other in fierce opposition, the fish with the widest swallow comes off victorious, and devours its antagonist. As a counterbalance to this great voracity, fish are amazingly prolific. Some bring forth their young alive, others produce only eggs; the former are the least fruitful; yet even those produce in great abundance. The viviparous blenny, for instance, brings forth two or three hundred at a time. Those which produce eggs are much more prolific. Naturalists declare, that the cod spawns above nine millions in a season. The flounder commonly produces a million; and the mackerel above five hundred thousand. Scarcely one in a hundred of these eggs, however, brings forth an animal; they are devoured by all the lesser fry that frequent the shores; by water-fowl in shallow waters; and by the larger fish in deep waters. Such a prodigious increase, if permitted to come to maturity, would overstock nature: even the ocean itself would not be able to contain, much less provide for, one half of its inhabitants. Two wise purposes are answered by their great increase; it preserves the species in the midst of numberless enemies, and serves to furnish the rest with a sustenance adapted to their nature.

Fish, like the land animals, are either solitary or gregarious. Some, as the sturgeon, trout, salmon, &c. migrate to deposit their spawn.

We shall now notice such as are found in the rivers of this county, arranged according to the Linnæan System, as modified by Dr. Shaw. This arrangement differs, however, from that of Gremlin's, in his edition of the Systema Naturæ; he divides them into six orders: viz. 1. *Apodal;* 2. *Jugular;* 3. *Thoracic;* 4. *Abdominal;* 5. *Branchiostagous;* and 6. *Chondropterygious.*

Order 1. Apodes.

Bony fish without ventral fins.

GENUS. *Anguilla*, Eel.—Head smooth; nostrils tubular; eyes covered by the common skin; gill membrane ten-rayed; body roundish, smooth, mucous; dorsal, caudal and anal fins united; spiracles behind the head or pectoral fins.

These fish, which are viviparous, evidently form a connecting link, in the chain of nature, between the serpents and fish, possessing not only, in a great measure, the serpent form, but also many of their habits. They have been frequently known to quit their element, and to wander in the night over meadows in search of snails and other prey, and to other ponds for change of habitation. Their usual haunts are in mud, among weeds, under roots or stumps of trees, in holes in the banks or bottom of rivers. They are partial to still water, and such as is muddy at the bottom.

Eels are best in season from May to July, but may be caught with a line till September. The baits generally used are dew-worms, wasp-grubs, minnows, gudgeons, &c.: the largest and best are caught by night-lines.

Anguilla Vulgaris, Common Eel.—Olive brown; subargenteous beneath; the head compressed and narrower than the body, with the lower jaw longer than the upper, and the body cylindrical with scales hardly perceptible. They seldom exceed a foot in length.

Order 2. Jugulares.

Fish with bony gills, and ventral fins before the pectoral ones.

Gadus Lota, Burbot or Eelpout.—Yellowish olive, variegated with black; mouth bearded; jaws equal; tail rather oval: body growing to three feet long; slender; head like a toad. These fish are to be caught in the Trent and Derwent, and in the back cuttings, Sinfen moor.

Order 3. Thoracici.

Bony fish with the ventral fins placed directly under the pectoral.

GENUS. *Cottus*, Bullhead.—Head broader than the body; spiny eye vertical and furnished with a nictitating membrane six-rayed; body (in most species) without scales; attenuated towards the tail; dorsal fins (in most species) two.

Cottus Gobio, RIVER BULLHEAD.—Smooth yellowish olive, variegated with black; beneath whitish; head furnished with a spine on each side: length five or six inches.

GENUS. *Pleuronectes*, FLATFISH.—Head small; eyes both on the same side of the head and near each other; mouth arched; jaws unequal, toothed; gill membrane four to seven-rayed; body flattened, one side a little convex and coloured, representing the belly; vent near the end.

Pleuronectes Flesus, FLOUNDER.—Brown, with the lateral line rough; at the base of the fins a series of asperites.

GENUS. *Perca*, PERCH.—Teeth; sharp incurvate gill covers triphyllous (three leaved) scaly cerated; dorsal fin spiny on the fore part; scales (in most species) hard and rough.

Perca Fluviatilis, COMMON PERCH.—Olivaceous, with transverse semi-decurrent blackish bands; dorsal fin subviolaceous, the rest red; body deep; scales rough; side lines placed near the back.

For beauty of colour, these fish nearly equals the gaudiest of the inhabitants of our rivers and ponds. They are gregarious. Their flesh is firm, delicate and much esteemed. They seldom grow to any great size; but from the ease with which they are taken and transported, they have become the most common inhabitants of our fish-ponds. They have been caught in the Derwent 4½ lbs. weight.

Perca Cernua, RUFFE PERCH.—Sub-olivaceous; speckled with black, with fifteen spines in the dorsal fin: length about six inches.

GENUS. *Gasterosteus*, STICKLEBACK.—Body somewhat lengthened; dorsal spines distinct; ventral fins spiny; abdomen carvinated on the sides, and bony beneath.

Gasterosteus Aculeatus, COMMON STICKLEBACK.—Olivaceous; silvery red beneath, with three dorsal spines: length barely two inches.

ORDER 4. ABDOMINALES.

Bony fish with the ventral fins placed behind the pectoral.

GENUS. *Cobitis*, LOACH.—Mouth (in most species) bearded; eyes situated in the upper part of the head; body of nearly equal thickness from head to tail; scales small, easily deciduous; air bladder hard or asseus.

Cobitis Barbatula, COMMON LOACH.—Yellow grey, with dusky variegations; small compressed head and six beards.

The Rev. Gilbert White, in his Natural History of Selborne, gives the following description of this little fish: "The loach in its general aspect has a pellucid appearance; its back is mottled with irregular collections of small black dots not reaching much below the *linea lateralis* as are the back and tail fins; a black line runs from each eye down to the nose; its belly is of silvery white; the upper jaw projects beyond the lower, and is surrounded with six feelers, three on each side; its pectoral fins are large, its ventral much smaller; the fin behind its anus small; its dorsal fin large, containing eight spines; its tail, where it joins to the tail fin, *remarkably broad*, without any taperness, so as to be characteristic of this genus; the tail fin is broad and square at the end. From the breadth and muscular strength of the tail, it appears to be an active nimble fish. Length about four inches.

Cobitis Tænia, GROUNDLING LOACH.—Found in the Trent.

GENUS. *Salmo*, SALMON.—Head compressed, smooth; tongue cartilaginous; teeth both in the jaws and on the tongue; gill membrane from four to ten-rayed; body compressed, furnished at the hind part with an adipose fin, and covered with round and minutely striated scales.

Salmo Salar, COMMON SALMON.—Silvery grey; spotted; with the jaws (in the male) incurvated.

These fish live in fresh as well as in salt water, but seem in a great measure confined to the northern seas. In autumn they force themselves hundreds of miles up the rivers for the purpose of depositing their spawn; and during their peregrinations they are not to be stopped even by cataracts. Rapid and stony rivers, such as the Derwent, the Dove, the Wye, and the Lathkil, where the water is free from mud, are the favourite places of most of the salmon tribe. When salmon are taken from their natural element they very soon die: to preserve their flavour they should be killed as soon as they are taken out of the water. Fishermen usually pierce them with a knife near the tail, when they soon die from loss of blood. Length from two to four feet.

Salmo Fario, COMMON TROUT.—Yellowish grey, with red and black spots; lower jaw rather longer than the upper; tail broad; scales small: length about twelve inches. The general shape is rather long than broad: it is a fish of prey, with a wide mouth filled with teeth, not only in the jaws but on the palate and tongue.

There are several sorts of trout, differing in their size, shape and hue; but the flesh of the

best is either red or yellow, when dressed. The female has a smaller head and deeper body than the male, and its spots vary in different waters and at different seasons. It is said to be in season from March to September. It is, however, fatter from the middle to the end of August than at any other time. The season for fishing is from March to Michaelmas. Cloudy weather is generally preferred for angling: the baits used are worms, artificial flies, &c. The trout is not easily caught with a line, being at all times exceedingly circumspect.

The rivers in this county are celebrated for breeding trout and grayling of a superior quality; and when the fishing season commences, Bakewell and Ashford are crowded with visitors from various parts of the kingdom. The Duke of Devonshire and the Duke of Rutland allow their tenants, Mr. Greaves, of the Rutland Arms Inn, Bakewell, and Mr. Frost, of the Devonshire Arms Inn, Ashford, to give tickets to those who stop at their respective houses. Trout begin to rise about the 7th of March; they are sometimes caught of a large size. One, measuring twenty-five inches and a half in length and fourteen inches round, and weighing 7½ lbs. 1½ oz. was caught in September, 1828, at Lathkil fishery, belonging to the Duke of Devonshire. We have heard of one being caught in the Via Gellia weighing 14 lbs. Mr. Tatlow has caught them, near to St. Mary's bridge, Derby, upwards of 5 lbs. Mr. Greaves, of Bakewell, exhibited one, caught in Loche Awe, in 1828, which weighed 15 lbs.

Salmo Thymallus, GRAYLING.—Grey, with longitudinal dusky blue lines, and violet colour; dorsal fins barred with brown: length about eighteen inches.

This elegant fish has a small head with protuberent eyes, the irides of which are silvery, speckled with yellow; the mouth is of a middle size, and the upper jaw the largest; the teeth are very minute; the head is dusky, the covers of the gills are of a glossy green, yet when in the highest perfection these parts are blackish; the back is of a dusky green, inclining to blue; the sides are of a fine silvery grey: when first taken they seem to glitter with spangles of gold, and are marked with black spots irregularly placed. The side line is nearly straight, the scales large, and the tail much forked.

These fish haunt rapid and clear streams; and the rivers in this county are suitable for them, particularly the Dove, the Wye and the Lathkil: the former river was visited by Walton and Cotton, who speak in the highest praise of the quality of the fish, and the diversion they experienced.

Grayling bite during the whole of cool, cloudy days; but the preferable time in spring and summer is from eight until twelve in the morning, and from four until sun-set in the evening; and from September to January in the middle of the day. Worms, insects and water snails are their principal food. They spawn in April and May. From September to January they are in the greatest perfection. They are very voracious, rise eagerly at the fly, will pursue the bait after they have missed it several times, and thus afford great amusement to the angler. They have been taken 4 lbs. weight.

GENUS. *Esox*, PIKE.—Head somewhat flattened above; mouth wide; teeth sharp, in the jaws, palate and tongue; body lengthened; dorsal and anal fins (in most species) placed near the tail, and opposite each other.

Esox Lucius, COMMON PIKE.—Greyish olive, with yellowish spots, and depressed subequal jaws; the head is very flat, the eyes are large and of a gold tinge, the upper jaw is broad and shorter than the lower, which turns up a little at the end; the teeth are very sharp, and disposed not only in the point of the upper jaw, but in both sides of the lower, in the roof of the mouth, and it has often three rows upon the tongue, and even down to the orifice of the stomach; the gape of the jaw is wide; they have on each side an additional bone like the jaw of a viper, which renders them capable of greater distention when the prey is swallowed; the body is long, the back broad, and the belly is always white. When in high season their colours are beautiful, being green, spotted with bright yellow, and the gills are of a vivid red; when out of season the green assumes a grey appearance and the yellow spots turn pale. They breed but once a year, and spawn in March and April.

The pike has been poetically styled the Wolf of Fish, and Tyrant of the Watery Plain; it is also called the fresh water Shark: he is in fact, the most active and voracious of the fresh water fish. He will attack every fish less than himself, and is sometimes seen choaked by attempting to swallow such as are too large a morsel; nor does the pike confine itself to feed on fish and frogs, but will draw down young ducks and water rats as they are swimming about. Walton says, several kinds of frogs are destructive to pike.

These fish afford good diversion to the angler, being bold biters. For trolling, the rod should be from twelve to fourteen feet long. The best baits are gudgeons or dace of a middling size; the bait should never be thrown too far. Pike are to be allured by a large bait, but a small one is more certain to take them. Mr. Thomas Tatlow, landlord of the Old Seven Stars Inn, Derby, has a particular method of trolling for pike, and he has caught several upwards of 20 lbs. each: and we are told they have been taken in the Derwent and Trent 36 lbs. Length two to three feet and upwards. Gesner says, the bite of a pike is venomous, and hard to be cured.

GENUS. *Cyprinus*, CARP.—Mouth small and toothless; teeth in the throat; gill membrane three-rayed; ventral fins in general rayed.

Cyprinus Carpio, COMMON CARP.—Yellowish olive; wide dorsal fin, with the third ray

cerated behind. Their form is somewhat thick, the scales are large, and on each side of the mouth there is a single beard, and above this another shorter; the tail is forked.

Carp, from their quick growth and vast increase, are the most valuable of all fish for the stocking of ponds; and if the breeding and feeding of them were better understood and more practised, the advantages would be very great. They spawn in May and June, seeking places covered with grass or plants for depositing their eggs. Their food is principally mud-worms and aquatic insects.—These fish are long-lived and so tenacious of life, that they may be kept alive in wet straw or moss more than a fortnight. They have been taken in Osmaston old waters 14 lbs. weight. They seldom exceed three feet in length, and 20 lbs. weight. Carp are supposed to have been brought to this country in the beginning of the sixteenth century.

Cyprinus Brama, BREAM.—Broad olivaceous, with flesh coloured abdomen; smallish dorsal fin, and twenty-seven rays in the anal fin; it has a blunt snout, with the upper jaw a little protruded; the front is dark blue and the cheeks inclining to yellow; the back is blackish, sharp, and resembling a bow on the stretch: they are covered with large bright scales: the lateral line is curved towards the belly, and ornamented with black spots: the tail is crescent shaped and of a dark blue colour. They spawn in May; and being fond of worms will readily take a bait. They have been taken in the Trent at Weston Cliff 7 lbs. weight: length two feet or more.

These fish are found in all the great lakes, and in rivers which have a gentle current and a bottom composed of marl, clay and herbage, and abide in the deepest parts; their flesh is inferior to that of the carp.

Cyprinus Rutilus, ROACH.—Yellowish silvery, with olivaceous back; dorsal fin brown, the rest reddish, and forked tail. This fish is deep, yet thin made, with large and deciduous scales. The belly fins are of a bright crimson, and the irides of the eyes sparkle like rubies and granate. Its length is from nine to ten inches, and weight from half a pound to 2 lbs. but it sometimes attains 4 lbs. Deep still rivers are its chief haunts.

Cyprinus Tinca, TENCH.—Mucous blackish olive, with very small scales, and nearly even tail. It has been taken out of the Trent and Derwent $2\frac{1}{2}$ lbs. Length twelve to fourteen inches.

Cyprinus Barbus, BARBEL.—Bluish white, with four beards, olive coloured back, and the first ray of the dorsal fin cerated on both sides. It is a coarse fish, and has been taken in the Trent and Derwent upwards of 11 lbs.

Cyprinus Jeses, CHUB.—Silvery bluish, with olivaceous back, thick head and roundish snout; the belly is white, the pectoral fins are of a pale yellow, the ventral and anal fins red, and the tail brown and slightly forked.

These fish frequent deep holes in rivers and hollow banks; but in the summer season they ascend to the surface and lay quiet under the shade of a tree; but, on the least alarm, they dive with great rapidity to the bottom. They live on all kinds of insects. In March and April they may be caught with large red worms; in June and July, with flies, snails and cherries; and in August and September, cheese pounded in a mortar with saffron and a little butter. They are the best in the winter season, their flesh being more firm and better tasted, and the roe in general well flavoured. If the angler keeps his bait at the bottom in cold weather, and near the surface in the hotter months, he will have good sport, the fish being sure to bite. When chub seize the bait they bite with so much eagerness that their jaws are frequently heard to chop like those of a dog. They have been taken in the Trent and Derwent 6 lbs. weight. Length fourteen to sixteen inches.

Cyprinus Leuciscus, DACE.—Yellowish silvery, with ovilaceous back, dorsal fin brown, the rest reddish, forked tail, and the lateral line curved downwards. The aperture of the mouth is middle-sized, and, like the rest of the leather-mouthed tribe, the teeth are in the throat. It is prolific, gregarious and very lively, being fond of playing near the surface of the water in summer. Its usual haunt is where the water is deep, and the stream is gentle near the piles of bridges. It seldom weighs more than a pound, or exceeds ten inches in length.

Cyprinus Alburnus, BLEAK.—Silvery, with ovilaceous back, twenty rays in the anal fin, and forked tail: length five or six inches; weight 2 oz.

This fish is an excellent bait for a pike.

Cyprinus Gobio, GUDGEON.—Silvery olive, with the upper lip bearded, and the dorsal fin and tail spotted with black.

This fish spawns in April, and is often used as a bait for the pike, &c. Length five or six inches.

Cyprinus Phoxinus, MINNOW OR PINK.—Blackish green, with blue and yellow variegations; reddish silvery abdomen, and forked tail: length two or three inches.

Order 5. Cartilaginei.

Fish with a cartilaginous skeleton.

GENUS. *Petromyzon*, Lamprey.—Body eel-shaped; mouth placed underneath, with numerous teeth in circular rows; spiracles seven on each side the neck and one on the nape; pectoral and ventral fins none. In the Trent and Derwent rivers.

Petromyzon Fluviatilis, Lampern or Seven Eyed Eel.—Dusky blue; beneath silvery; fins violet; the second dorsal fin angular and united to the tail: length ten or twelve inches. In the Trent and Derwent rivers.

Petromyzon Branchialis, Nine Eyed Eel.—In the Trent and Derwent rivers. Length five or six inches.

GENUS. *Acipencer*, Sturgeon.—Snout, bearded underneath, mouth placed beneath, the head oval, retracetile, without teeth; aperture of the gills on the sides of the head; body elongated, mailed above by bony tubercles.

Acipencer Sturio, Common Sturgeon.—Grey, with dusky variations, beneath white; body rough, with five rows of spinous tubercles; lips cloven: length from six to eighteen feet.

Formidable as this large fish is in appearance, it is perfectly harmless. Its snout is long and obtuse at the end, with tendrils at the tip. Its mouth, which is beneath the head, is somewhat like the opening of a purse, and is so formed as to be pushed suddenly out, or retracted. The tendrils on its snout, which are some inches in length, have so great a resemblance to earth-worms, that, at first sight, they may be mistaken for them. By this contrivance, this clumsy, toothless fish is supposed to keep itself in good condition; the solidity of its flesh evidently shows it to be a fish of prey. It is said to hide its body among the weeds near the sea coast or at the mouths of large rivers, only exposing its tendrils, which small fish or insects, mistaking for worms, approach to seize, and are sucked into the jaws of the enemy. As this fish has no teeth, it is evident that it lives by suction.

At the approach of spring these fish leave the deep recesses of the sea, and enter the rivers to spawn. As they are not voracious fish, they are never caught by baits, but in nets. We have never heard of any having been caught in the Derwent: they are, however, frequently taken in the Trent, but not in large numbers. A sturgeon was taken in the Trent under Donington castle, in the year 1255, that measured eight feet, the old people then affirming that a similar fish was caught in the same place the year before the coronation of king John (Annals of Burton Monastery, p. 342.) We have heard of one being taken in the Trent at Nottingham Meadows of a large size. In 1791 one was caught at Kings Mills seven feet long. (Stebbing Shaw's History of Staffordshire, vol. I. page 90.) Recently, one of a good size has been taken at Shardlow.

REPTILES.

Order 1. Amphibious Animals.

Rana Bufo, Toad.—Appear about the end of February; back broad, black, beset with tubercles; belly swollen, yellow, with black spots; crawls: a loathsome creature, though the eyes are beautiful.

It is said that toads take away from water every poisonous quality, and that they are venomous. It is plain they are not noxious to some animals, for ducks, buzzards, owls, stone-curlews, and snakes eat them with impunity. Many well-authenticated instances are recorded of living toads having been found in solid blocks of stone and timber trees;* they are supposed to have crept in through an aperture, and growing could not get out again. Such as have been found in trees were grown round by vegetation; and those in stone by petrifaction. In that dormant state they required little or no sustenance, having little or no stimulus to exhaust them: they generally die upon the access of fresh air.

This animal is in figure, nature and appetites like the frog. When irritated it emits from various parts of the skin a kind of frothy fluid, that, in our climate, produces no further unpleasant symptoms than slight inflammations. The female deposits its spawn early in the spring, in the form of a neck-lace-like chain, or string of transparent gluten, upwards of three feet long. These have the appearance of so many jet-black globules, and are the tadpoles lying in a globular form. The toad becomes torpid in autumn and continues so during the winter months.

* Found in a rock at Blackhole, where limestone is procured, by the Peak Forest Canal Company, a live toad, six inches across the back. It was not discovered that there were any aperture in the rock communicating with the hole, which was quite smooth in the interior. This is another instance of the authenticated and yet hard-to-be-accredited fact of toads being found inclosed in rocks.—*Chesterfield Gazette.*

Rana Temporaria, FROG.—In colour it varies considerably, but its general tinge is olive-brown. It is less than the toad, back smooth, margin of the upper-jaw white; leaps: torpid in winter; in ponds and ditches.

In March, enlivened by the warmth of spring, they rise to the surface of the water in vast numbers, and soon make a great croaking. They spawn in March: the young tadpole is a curious and interesting little animal. The young frogs migrate from the middle of June to August. Walton says, they destroy the young fry in fish-ponds.

Lacerta Agilis, COMMON LIZARD OR SWIFT.—Tail round and scaly; five toes and nails on each foot; belly black and spotted.

Lacerta Vulgaris, COMMON EFT, BROWN LIZARD, NEWT OR ASKER.—Fore feet four toes, hind feet five; without nails; a brown line on each side of the head. For want of gills it is continually rising to the surface of the water to take in fresh air. Appears about the 1st of April, and is last seen in October.

Lacerta Palustris, WATER EFT OR LIZARD.—Three or four inches long; above black brown, beneath deep yellow, spotted; feet like the former. There are varieties of them; some have fins up their tail and back, and some have not.

ORDER 2. SERPENTS.

Coluber Berus, VIPER OR ADDER.—The ground-colour of their bodies is a dirty yellow, the back is marked with a series of rhomboid black spots, and the belly is black: the length seldom exceeds two feet.

Providence has been so kind to us as to allow of but one venomous reptile of the serpent kind in this kingdom, and that is the adder. This reptile has been seen amongst the rocks at Matlock, and frequently on the moors. Though they are oviparous yet they are viviparous also, hatching their young within their bellies, and then bring them forth. They lay ten or eleven eggs, and appear the latter end of February or the beginning of March. Their bite is said to be very dangerous, yet swine and peacocks devour them greedily. Common salad oil is said to be a sovereign remedy against the bite of the viper. Vipers crawl slowly at all times, and only attack such smaller animals as come within their reach.*

Coluber Natrix, SNAKE.—Swim very swiftly, prey on lizards under water, and are very prolific if undisturbed. They appear about the end of March, and lay their eggs in dunghills. Seventy have been destroyed in one dunghill. Snakes cast their skins about September.

"—— There the snake throws her enamelled skin." *Shakspeare.*

Anguis Fragilis, BLIND WORM.—Common on heaths and the Moorland hills. It is perfectly harmless, though considered to be poisonous by the peasantry.

A SKETCH OF THE ENTOMOLOGY OF DERBYSHIRE.

"———————— Each moss,
Each shell, each crawling insect, holds a rank
Important in the plan of Him who formed
This scale of beings; holds a rank, which lost,
Would break the chain, and leave a gap
That Nature's self would rue!"

The name of insect, is derived from the circumstance of the individuals which bear it having, in general, a separation in the middle of their bodies, by which they are cut, as it

* The Rev. Gilbert White, in his History of Selborne, says, "On August the 4th, 1775, we surprised a large viper, which seemed very heavy and bloated, as it lay in the grass basking in the sun. When we came to cut it up, we found that the abdomen was crowded with young, fifteen in number; the shortest of which measured full seven inches, and were about the size of full-grown earth-worms. This little fry issued into the world with the true viper spirit about them, showing great alertness as soon as disengaged from the belly of the dam: they twisted and riggled about, and set themselves up, and gaped very wide when touched with a stick, showing manifest tokens of menace and defiance, though as yet they had no manner of fangs that we could find, even with the help of our glasses.

"To a thinking mind nothing is more wonderful than that early instinct which impresses young animals with the notion of the situation of their natural weapons, and of using them properly in their own defence, even before those weapons subsist or are formed. Thus a young cock will spar at his adversary before his spurs are grown: and a calf or lamb will push with their heads before their horns are sprouted. In the same manner did these young adders attempt to bite before their fangs were in being. The dam, however, was furnished with very formidable ones, which we lifted up (for they fold down when not used) and cut them off with the point of our scissars.

"There was little room to suppose that this brood had ever been in the open air before; and that they were taken in for refuge, at the mouth of the dam, when she perceived that danger was approaching; because then, probably, we should have found them somewhere in the neck, and not in the abdomen."

were, in two parts. Insects breathe through pores arranged along their sides, and have no hearts or arteries. Nearly all of them, with the exception of spiders, and a few others of the apterous tribe, undergo three changes, at different periods of their existence. The animal is first produced as an egg; from these eggs proceed the larvæ, grubs or caterpillars; which as soon as they are perfected, take a new form, that of the pupa or chrysalis; and lastly, from the chrysalis emerges the perfect animal.

By Linnæas insects are divided into seven orders: viz.

1. *Coleopterous insects.* These have crustaceous elytra, or shells, which shut together and form a longitudinal suture down the back. Such as beetles, lady-cows and earwigs.

2. *Hemipterous insects.* These have their wings half crustaceous and half membranaceous, not divided by a longitudinal suture, but incumbent on or crossed over each other. Such as the cockroach and locust.

3. *Lepidopterous or scaly winged insects.* The wings of these are covered with fine scales, seeming like powder or meal. This class includes butterflies and moths.

4. *Neuropterous insects.* These take their denomination from their having four membranaceous transparent naked wings, in which the membranes cross each other like net-work, as is to be seen in the dragon fly. The tail is stingless.

5. *Hymenopterous insects.* These have, in general, four membranaceous naked wings, not so much resembling net-work as the wings of the neuroptera; and, except in the male, the tail is armed with a sting. The bee, the wasp and the ant, are of this tribe. In some of the genera, the neuters, and in others the males and females, are without wings.

6. *Dipterous insects.* These, as may be seen in the house-fly and the gnat, have only two wings, each of which has a balancer.

7. *Apterous insects.* These are such as are wingless. An order which includes many tribes: among these are the flea, the spider, the scorpion, the crab, &c.

Order 1. Coleoptera.

Lucanus Cervus, Great Stag Beetle.—It is of a dark brown colour, with the exception of the jaws, which are frequently as red as coral. When this occurs it has a beautiful appearance.

This insect, which is the largest this county produces, may easily be distinguished by its jaws, which resemble the horns of a stag. It frequents oak and willow trees. From the point of its jaws, to the extremity of the abdomen, it sometimes measures three inches. It flies abroad, and feeds upon the leaves of plants and trees, only in the evening, and is principally seen in June or July. The mandibles are so strong, that it can pinch with them severely.

Scarabæus Auratus, Rose Chaffer.—Appears the beginning of June.

Scarabæus Solsit, Hoary Beetle.—Appears in July.

Crysomela Nemorum, Turnip Beetle.—Skippers, preys on the young turnip plants.

Curculio Granarius, Weevil.—This long-snouted insect devours corn in granaries.

Coccinella Bipunctata, Lady Cow or Lady Bird.—This is a well known and beautiful insect, it appears about the middle of April, and seeks its food on the leaves of trees and plants. They were very numerous in the summer of 1828.

Forficula Auricularia, Earwig.—Common.

Scarabæus Melolontha, Cockchaffer or May Bug.—These insects seldom abound, as they live in their larvæ state four years under ground, during which time they live on the roots of trees and plants, and their ravages are frequently very injurious in meadow land; when they swarm, they deface the trees and hedges. Whole woods of oak are stripped bare by them.

Chaffers are eaten by the turkey, the rook, the jay and the hedgesparrow. They appear in May, and were it not for these birds, would multiply to such a degree as to become a nuisance.

Scarabæus Solstitialis, Fernchaffer.—These insects appear about the latter end of June, and are supposed to eat off the roots of wheat and clover. They are a small species, about half the size of the May chaffer.

Order 2. Hemiptera.

Blatta Orientalis, Cockroach.—This is a kind of black beetle. The male is winged; the female is not, but shows somewhat like the rudiments of wings, as if in the pupa state.

These insects belonged, originally, to the warmer parts of America. They love warmth, and haunt chimney closets and the backs of ovens. They are altogether night insects, never coming forth until the rooms are dark and still, and escaping away nimbly at the approach

of a candle. Their antennæ are remarkably long, slender and flexile. Some bake-houses in Derby swarm with these insects.

Gryllus Domesticus, HOUSE CRICKET.—Its wings are tailed, and longer than the wing-cases: the body is of a light green colour, shaded with brown; and it is provided with six feet. When in the air, these insects move in curves like woodpeckers, opening and shutting their wings at every stroke, and so are always rising and sinking.

Some kitchen hearths swarm with minute crickets, not larger than fleas, during the winter months, which must have been lately hatched. So that these domesticated insects, cherished by the influence of a constant large fire, regard not the season of the year, but produce their young at a time when their congenors are either dead or laid up for the winter, to pass their time in the profoundest slumbers, and a state of torpidity. They utter a shrill note, and as soon as it grows dusk their chirping increases, and they come running forth of all sizes. They are fond of liquids, and may be destroyed like wasps, by phials half filled with beer, and set in their haunts.

Gryllus Gryllotalpa, MOLE CRICKET.—This little creature is a complete representative of the mole; its fore-feet are broad and strong, and in their formation and position, bear a great resemblance to the fore-feet of that animal. They are used for precisely the same purpose as those of moles, to burrow under the surface of the ground, where this insect generally resides. The female forms a cell of clammy earth, closed up on every side, and as large within as two hazel nuts: she lays nearly one hundred and fifty white eggs, about the size of caraway comfits, in May. They are carefully covered, to defend them from the injuries of the weather and the attacks of the black beetle, which often destroys them. The female places herself near the entrance of the nest, and when the beetle attempts to seize its prey, the guardian insect catches it behind and bites it asunder. They remove their nests to a great depth in the earth in the winter, to prevent the frost reaching them, and raise them again as the spring advances. They make a churring noise about the middle of April. These insects often infest gardens by the side of canals.

Gryllus Campestris, GRASSHOPPER.—Head somewhat like that of a horse, and is of a lively green colour. It has four wings and six legs; the hind legs being longer than the fore-legs, assists the insect in leaping. The corslet is armed with a strong buckler.

The grasshopper has three kinds of stomachs, is oviparous, and lays about one hundred and fifty eggs, which are white, oval, of a horny substance, and nearly the size of aniseeds. The female dies soon after she has produced them. They make a chirping noise, appear in June, and principally feed on grass.

Cimex Linearis.—The females of these insects vastly exceed the males in bulk. They dart and shoot along on the surface of the water. The sexes are found separate, except where generation is going on. From the multitude of minute young, of all gradations of sizes, these insects seem to be viviparous.

Scarabæus Stercorarius, COMMON DOR OR CLOCK.—Appears in February, and is last seen in November.

ORDER 3. LEPIDOPTERA.

Papilio Pictus, PAINTED LADY BUTTERFLY.—Butterflies may be said to consist of three parts; the head, the corslet, and the body. The body is the hinder part, and is composed of rings, which are generally concealed under long hairs, with which that part of the insect is clothed. The corslet is more solid than the rest of the body, and in which the fore wings and the legs are fixed. They have six legs, but only make use of four.

Butterflies have not all eyes of the same form; some are the larger portion of a sphere, in others they are but a small part of it, and just appearing from the head; some are large and some small, but in all of them the outer coat has a lustre, in which may be discovered all the colours of the rainbow.

Papilio Brassicæ, CABBAGE BUTTERFLY.—The caterpillar appears the latter end of April or the beginning of May, and breeds from May to July.

Papilio Hyale, SAFFRON BUTTERFLY.—Appears the latter end of August or early in September.

Papilio Semele, BLACK-EYED MARBLE BUTTERFLY.—Appears in August.

Papilio Moera, ARGUS BUTTERFLY.—Appears early in June.

Papilio Atalanta, ADMIRAL BUTTERFLY.—Appears the middle of May.

Papilio Pavus, PEACOCK BUTTERFLY.—Appears in March.

Papilio Urtica, NETTLE BUTTRFLY.—Appears from February to April.

Papilio Rhamni, BRIMSTONE BUTTERFLY.—Appears from February to April.

Papilio Cardamines, ORANGE-TIPPED BUTTERFLY.—Appears about the middle of May.

Papilio Machaon, Swallow-tailed Butterfly.—Appears from May to September.

Papilio Ægeria, Wood Argus Butterfly.—Appears about the middle of May.

Papilio Argentum, Silver-tipped Butterfly.—Appears in May or June.

Papilio Aldermannus, Alderman Butterfly.—Appears in May or June.

Papilio Chelonium, Tortoise-shell Butterfly.—Appears in May or June.

Papilio Imperator, Emperor Butterfly.—Appears in May or June.

Papilio Phlæas, Small Golden Black-spotted Butterfly.—Appears the latter end of August.

Sphynx Ocellata, Humming-bird Moth.—A vast insect, appears after it is dusk, flying with a humming noise, and inserting its tongue into the bloom of the honey-suckle; it scarcely settles upon the plants, but feeds on the wing, in the manner of humming-birds.

Sphynx Ligustri, Privet Moth.

Sphynx Filipendulæ, Burnet Moth.—Appears in May or June.

Phalæna Caput mors, Death's-head Moth.—One of these fine and rare insects was killed in Derby in the summer of 1828, and is now in Cooke's collection; it measures nearly five inches from tip to tip of the wings.

Phalæna Prasinana, Leopard Moth.

Phalæna Pacta, Willow Moth.—Red under the wings; appears about the end of August.

Phalæna Tinea Vestianella.—This moth eats cloathes. It appears the latter end of February.

Phalæna Quercus, Oak Moth.—Of a pale yellow, and sometimes of a pale green colour. The aurelia of this moth is shining and as black as jet: and lies wrapped up in a leaf of the tree, which is rolled round it, and secured at the ends by a web, to prevent the maggot from falling out. These insects, though a feeble race, yet from their infinite numbers are of wonderful effect, being able to destroy the foliage of whole forests and districts; when they leave their aurelia and issue forth in the fly-state, they are seen swarming and covering the trees and hedges. In the summer of 1828, I saw a hedge in Darley Dale, whose leaves were completely eaten off by these insects. *Glover.*

Order 4. Neuroptera.

Libellula Grandis, Great Dragon Fly.—Several varieties of these beautiful insects appear in May. They sport and fly over waters, and numbers are seen in the air in fine weather.

The great dragon fly is about four inches long; its colours are varied and brilliant: as green, blue, crimson, scarlet, &c. Its four wings are large, and of a delicate texture, and its eyes are very bright.

Libellula Vulgatissima, Small Dragon Fly.—All of this tribe are rapid in their motions, and exceedingly voracious. They prey on insects.

The caterpillar is a name common to the larvæ of many varieties of insects. In September they may be seen in abundance. They keep together under the cover of a fine web, which they spin to defend themselves from the inclemency of the weather; and in this they pass the winter months in nearly a torpid state: during which time they require no food, nor do they venture out of their general covering until invited by the warmth of spring. As they increase in size, they spread abroad in search of food.

The caterpillar arrives at its full growth about the latter end of April; when full grown they suspend themselves by the tail to change into chrysalids, in which state they remain fourteen days. Their mode of suspension is a singular instance of the extraordinary power of instinct.

Order 5. Hymenoptera.

Apis Mellifica, Common Honey Bee.—This is a small insect, of a brown colour, covered on the corslet and belly with hairs; it has four wings and six legs, and the thighs are covered with strong bristles. Each bee is furnished with a trunk or proboscis, folded up, but capable of being extended at pleasure. It is with this instrument they collect their food, by licking it from the nectaria of flowers. Observations have proved, that it is only the queen and the labouring bee that have stings; and this provision of a sting is perhaps as curious a circumstance as any attending the bee. The sting is curiously constructed, and fitted not only for inflicting a wound, but for conveying, at the same time, a poison into that wound.

There are, of the domestic bee, at certain seasons of the year, three kinds in every hive; the males, the females, and the bees without sex. The number of the latter is beyond comparison greater than that of the other two kinds, and the whole drudgery of the hive falls upon them. It is only during one or two months in the summer, when the hives are most crowded, that males are found in them; and even then, they do not amount to one-tenth of the whole: but they are of a superior size. During the whole course of the season, except a few days, there is only a single female to be discovered in the most numerous hive. From a number of well-attested experiments and observations, it appears that her life is more precious than any of the rest, for she is the soul of all their operations. If a hive be deprived of her, however numerous, it will undertake no labour; and the individuals will scarcely collect their daily subsistence; but the moment she is restored, their wonted activity is resumed by the whole swarm. During the summer, the queen bee produces a vast number of eggs, which she continues to drop, one after another, into the empty cells. Her fecundity is so prodigious, that she is soon capable of multiplying her family to such a degree that the hive can no longer contain it. To her the whole swarm, from ten to twenty thousand, owe their birth. In three weeks' time, the young bees are ready to make their appearance as winged animals, and their first employment is to eat away the wax with which the entrance of their cells had been secured.

When bees begin to work in their hives, they divide themselves into four companies; one of which roves into the fields in search of materials: another employs itself in laying out the bottom and partitions of the cells: a third in making the inside smooth, from the corners and angles: and the fourth company brings food for the rest, or relieves those who return with their respective burdens. They are proverbial for industry, and furnish us with two of the necessaries of life, food and light; and although they appear to gather honey and wax merely for their own comfort, yet man has turned it to his advantage. They appear at the mouth of their hives in January, swarm from May to July, and kill the drones towards the end of July.

Apis Terrestris, HUMBLE BEE.—Builds its nest in mud walls and in the ground; it is the largest species.

Bombylius Minor, LESSER HUMBLE BEE.—Appears about the 1st of May.

Apis Manicata, MANICLED BEE.—Appears early in August.

Apis Longicornis.—This bee appears in May, and bores holes in walks in May and June.

Vespa Vulgaris, WASP.—Resembles the bee in some particulars, though it differs from it in others. There are three different kinds of flies, as among the bees, but the greatest share of labour devolves on the neuters. The nest of the wasp is generally built under the surface of the earth in a bank, and sometimes it is formed in the forsaken dwelling of the mole. It is of a roundish form, about a foot in diameter, and is curiously constructed. Wasps appear in May; the female is larger than the male, and the sting is well known. They feed principally on fruit, and catch flies and caterpillars to carry to their young. When there is no fruit in the gardens, wasps eat flies and suck the honey from flowers, ivy blossoms and umbellated plants; they are very troublesome in grocer's shops, and will carry off flesh from butcher's shambles.

Formica Nigra, BLACK ANT.—Appears in March.

Formica Fusca, ANT.—Proverbial for industry.

Formica Rubra, RED ANT.—Appears about the middle of April.

Formica Herculeana, HORSE ANT.—Appears about the latter end of March to the latter end of April. Flying ants migrate in August and September; about this time every ant-hill is hurry and confusion; and all the winged ants, agitated by some violent impulse, are leaving their homes and bent on emigration. They swarm by myriads in the air, to the great emolument of the hirundines, which fare luxuriantly.

ORDER 6. DIPTEROUS INSECTS.

Oestrus Bovis, BREEZE OR GADFLY.—Breeds on the backs of cattle, and are great tormentors of both man and beast.

Ephemera Cauda Biseta, MAY FLY.—In the month of June the air is sometimes crowded with them, and the surface of the water covered. Large trout suck them in as they lie struggling on the surface of the stream, unable to rise until their wings were dried. Their motions are very peculiar, up and down for many yards, almost in a perpendicular line.

Tabanus Bovinus, GREAT HORSE-FLY.—Appears from June to August. A great plague to horses and men.

Conops Calcitrans, STINGING FLY.—Appears about the middle of April to the middle of May.

Combylius Medius, BUZZ FLY.—Appears towards the end of March to the end of April.

Asilus, WOLF FLY.—Appears towards the end of April.

Hippobosca Equina, FOREST FLY OR NOSE FLY.—Appears May and June.
A species of fly which proves very tormenting to horses; trying to enter their nostrils and ears, and actually laying their eggs in the latter of those organs, or perhaps in both. When these abound, horses in woodland districts become very impatient at their work, continually tossing their heads and rubbing their noses on each other: so that in the heat of the day, men are often obliged to desist from ploughing to prevent accidents.

Musca Cæsar, GREEN GOLD FLY.—Appears the beginning of June.

Ephemera Vulgaris, ANGLER'S MAY FLY.—Appears in May and June.

Oestrus Bovis, WHAME OR BURREL FLY.—Lays eggs on horses in August.

Trenthredo Rustica, TURNIP FLY.—The caterpillars of this fly sometimes prey upon turnips.

Musca Vomitoria, BLUE FLESH FLY.—Appears the latter end of April to the end of May.

Musca Carnaria, COMMON FLESH FLY.—Appears the middle of April.

Musca Domestica, DOMESTIC HOUSE FLY.—This and the preceding are two very well known species.

Culex Pipiens, COMMON GNAT.—This insect feeds on the blood of animals.

Vespa Crabro, HORNET.—Length one inch; sometimes gets into upper rooms.

Ephemera, SHORT-LIVED INSECT.—Produced and exhausted in a day or two.

Bombylus Medius, HUMBLE-BEE FLY.—Hovers in the air, and darts with celerity.

Musca Tenax.—This fly appears from February to April.

Musca Meridiana, NOON FLY.—Appears the latter end of April or May.

Lytta Vesicatoria, SPANISH FLY.—Appears the latter end of May, is of a venomous nature, shining like gold, and breeds on the tops of ash and other trees. It is used to raise blisters.

Cantharis Noctiluca.—A sort of fly of the beetle kind, but less; appears the latter end of May, eats and consumes corn.

Oestrus Curvicauda, GADBEE OR DUN FLY—Appears in June, and lays its nits or eggs on horses legs, flanks, &c. each on a single hair.

In addition to the above flies, we may add the following list, which are well known to the expert angler: viz. barm fly, black fly, black hackle, blue dun, brown gnat, camlet fly, camel brown fly, chamblet fly, cow-dung fly, dark brown fly, drake fly, fern bud fly, great hackle fly, green peacock hackle, green tail fly, green drake fly, grey drake fly, harry long-legs fly, hawthorn fly, huzzard fly, knob fly, knotted grey gnat, lesser hackle fly, mackerel fly, moorish fly, orange fly, owl fly, palmer fly, peacock fly, prime dun fly, purple fly, red brown fly, red hackle fly, red herb fly, ruddy fly, sad yellow fly, sand fly, shell fly, small bright brown fly, sooty dun fly, stone fly, turkey fly, violet dun fly, violet fly, whirling dun fly, white dun fly, white hackle fly, white miller or owl fly, yellow or greenish fly, yellow dun fly, yellow May fly, yellow miller or owl fly, yellow watchet fly.

The ICHNEUMON FLY is considered very serviceable to mankind in reducing the number of noxious insects, by depositing their eggs in the soft bodies of their larvæ. Some ichneumon flies deposit their eggs in the aurelia of moths and butterflies.

Empedes or Tipulæ.—Millions of these insects come forth in May, at the close of day, and swarm to such a degree as to fill the air; all day they hide themselves in hedges. As they rise they appear like smoke. They live by sucking the blood of animals.

Aphides.—Armies of these insects migrate from hop plantations, and wherever they alight they blacken trees and vegetables. Almost every plant produces these insects.

ORDER 7. APTEROUS INSECTS.

Acarus, MITE.

Aphis Brassicæ, CABBAGE LOUSE.—Very minute, and very numerous on plants.

Oniscus Asellus, WOOD LOUSE.—Appears in March.

Pediculis, LOUSE.—This is a very extensive genus, of very remarkable forms; they live by extracting animal juices.

Pulex Irritans, COMMON FLEA.—Appears in February.

Cimex Lectuarius, BUG.—Appears early in March.

Termes Pulsatorius, DEATH WATCH.—Beats in April.

Plalangium Opilio, Long-legged Spider.—Eyes on the top of the head; this genus bear a considerable resemblance to the *Aranea*. Spiders shoot their webs about the middle of January, on which means their existence entirely depends.

Aranea Domestica, House Spider.

Aranea Hortulana, Garden Spider.

Aranea Obtextrix, Gossamer Spider.

The fore part, containing the head and breast, is separated from the hinder part or belly by a very slender thread; through which, however, there is a communication from one division to the other. The fore part is covered with a hard shell, as well as the legs, which adhere to the breast; the hinder part is clothed with a supple skin, beset all over with hair. They have several brilliant and acute eyes all round the head; some have six and others eight in number. Like all other insects, their eyes are immoveable, and are without eyelids: but this organ is fortified with a transparent horny substance, which at once secures and assists their vision. As the spider procures its subsistence by the most watchful attention, so large a number of eyes are necessary to give it the earliest information of the capture of its prey. The females lay six or seven hundred eggs, in bags which they make for that purpose, lined within by a down which they pluck from their own breast. These eggs are generally deposited in August or September, and in about sixteen days the young are hatched. They have all eight legs, jointed like and similar to those of lobsters.

VERMES.

Worms, according to the Linnæan System, are divided into five orders: viz. *intestinal*, *molluscous*, *testaceous*, *zoophyte*, and *animalcules*. The *testaceous* worms are subdivided into three classes: viz. *multivalves*, *bivalves* and *univalves*; to the latter of which belong all the individuals of the snail tribe.

Earth-worms make their casts most in mild weather about March and April; they do not lie torpid in winter, but come forth when there is no frost; they travel about in rainy nights, as appears from their sinuous tracks on the soft muddy soil, perhaps in search of food. When earth-worms lie out a-nights on the turf, though they extend their bodies a great way, they do not quite leave their holes, but keep the ends of their tails fixed therein, so that on the least alarm they can retire with precipitation under the earth. Whatever food falls within their reach when thus extended they seem to be content with, such as blades of grass, straws, fallen leaves, the ends of which they often draw into their holes.

Lands that are subject to frequent inundations are always poor; and probably the reason may be because the worms are drowned. The most insignificant insects and reptiles are of much more consequence, and have much more influence in the economy of nature, than the incurious are aware of; and are mighty in their effect, from their minuteness, which renders them less an object of attention than their numbers and fecundity. Earth-worms, though in appearance a small and despicable link in the chain of nature, yet, if lost, would make a lamentable chasm. For to say nothing of half the birds, and some quadrupeds, which are almost entirely supported by them, worms seem to be great promoters of vegetation, which would proceed but lamely without them, by boring, perforating and loosening the soil, and rendering it pervious to rains, and the fibres of plants, by drawing straws, stalks of leaves and twigs into it; and, most of all, by throwing up such an infinite number of lumps of earth called worm casts, which, being their excrement, is a fine manure for grain and grass. Gardeners and farmers express their detestation of worms; the former, because they render their walks unsightly, and make them much work; and the latter, because, as they think, worms eat their green corn. But these men would find that the earth, without worms, would soon become cold, hard bound, and void of fermentation, and consequently sterile; and besides, in favour of worms, it should be hinted that green corn, plants and flowers, are not so much injured by them as by many species of *coleoptera* (beetles) and *hipulæ* (long-legs) in their larva or grub state; and by unnoticed myriads of small shell-less snails, called slugs, which silently and imperceptibly make amazing havoc in the field and garden. Instances are recorded of slugs having entirely destroyed whole fields of wheat. Worms work most in the spring, are hermaphrodites and very prolific.

Lampyris Noctiluca, Glow Worm.—Numerous about Matlock Bath, on the banks of the Derwent. The light arises from two specks under the tail. They shine from the 1st of May to the middle of June. These little creatures are said to put out their lamps between eleven and twelve, and shine no more for the rest of the night.

Blood-Worms.—Appear in the water in March.

Anglers use the following worms as baits: viz. dew-worm, dock-worm, lob-worm, palmer-worm, straw-worm, cockspur-worm, &c. as also grubs and gentles.

Gordus Aquaticus, COMMON HAIR-WORM.—Frequent at Duffield.

Hirudo Sanguisuga, HORSE LEECH.—Ditches.

Hirudo Medicinalis, MEDICINAL LEECH.—Wardlow mires, near Tideswell.

Limex Ater, BLACK SNAIL OR SLUG.—Abound in moist shady places towards the end of April.

Helix Nemoralis, SHELL SNAIL.—Comes forth about the middle of April, and not only lays itself up pretty early in Autumn, in places secure from frost, but also throws out round the mouth of its shell a thick operculum, formed from its own saliva; so that it is perfectly secure from all inclemencies of the weather. Blackbirds feed much upon them.

Limax, SHELL-LESS SNAIL OR SLUG.—Are in motion all the winter in mild weather, and commit great depredations on garden plants, and much injure the green wheat, the loss of which is imputed to earth-worms. The reason why slugs are able to endure cold so much better than shell snails is, that their bodies are covered with slime, as whales are with blubber. Snails deposit their eggs in the mould, by running their heads and bodies under ground about midsummer. Hence the way to be rid of them is, to kill as many as possible before they begin to breed.

Large grey shell-less cellar snails lay themselves up about the same time with those that live abroad; hence it is plain that a defect of warmth is not the only cause that influences their retreat.

To the more transient observer, says an eminent naturalist, the snail appears to be little more than a lump of inactive matter, loaded with a crustaceous covering, and totally insensible to all the objects with which it is surrounded; but upon a more close inspection, it will be found to be possessed of every faculty that can possibly be requisite for the life it is formed to lead.

Their sizes are not less various than the countries and places in which they are found. They fill up all the intermediate gradations of magnitude, from that of an apple or egg to the minuteness of a grain of wheat; and in that diversity of size, exhibit all the colours of the rainbow, with the polish of ivory or marble. The eyes of snails are lodged in their horns, which are four in number, one at the end of each horn, which they can protrude or retract at pleasure. Snails are great destroyers of wall fruit. Lime and ashes, sprinkled on the ground where they resort, will drive them away and destroy the young brood of them; it is a common practice to pull off the fruit they have bitten, but this should never be done, for they will touch no other until they have wholly eaten that they have began of, if it be left for them.

They produce a great number of eggs, which are round, white, and covered with a soft shell. On quitting the egg, the animal has a very small shell on its back, with only one convolution; this very soon enlarges, and the circles increase with the growth of the animal; never, however, exceeding four rounds and a half in the garden snail. They chiefly subsist upon the leaves of plants and trees, but are very delicate in their choice.

Heliz complanata, FLATTENED SNAIL-SHELL.—Water, Duffield.

Helix Auricularia, WIDE-MOUTHED SNAIL-SHELL.—Makeney shallows, Duffield.

Helix Hortensis, LARGE GARDEN SNAIL-SHELL.—Land, Bolsover Castle.

Patella Lacustris, RIVER LIMPET.—Makeney shallows, Duffield.

Tellina Pusilla, MINUTE TELLEN.—Derwent.

Having given an imperfect sketch of the various subjects composing the three kingdoms of nature, so artfully contrived, so wonderfully propagated, and so providentially supported by their Allwise Creator for the use and convenience of man, to whom He has rendered every thing subservient, upon earth and in the waters, we shall conclude this chapter with the following extract from Dr. Darwin's Works: "To insects, and many smaller animals, their colours contribute to conceal them from the larger ones that prey upon them. Caterpillars, which feed on leaves, are generally green; and earth-worms the colour of the earth which they inhabit; butterflies, which frequent flowers, are coloured like them; small birds which frequent hedges have greenish backs like the leaves, and light coloured bellies like the sky, and are hence less visible to the hawk, who passes under them or over them. Those birds which are much amongst flowers, as the goldfinch, are furnished with vivid colours. The lark, partridge, hare, &c. are the colour of the dry vegetables or earth on which they rest. And frogs vary their colour with the mud of the streams which they frequent, and those which live on trees are green. Fish, which are generally suspended in water; and swallows, which are generally suspended in air, have their backs the colour of the distant ground, and their bellies of the sky. In the colder climates many of these become white during the existence of the snows. Hence there is apparent design in the colours of animals, whilst those of vegetables seem consequent to the other properties of the materials which possess them."

CHAPTER IV.

Preliminary observations on the agriculture of Derbyshire. Estates, value of land, leases and rents, farms, cottages, tithes, &c.; implements of agriculture; inclosures; fences and hedges; hedge-row timber; gates.—Tillage; courses of crops; meadow and pasture; grasses; dairy farms; cattle, &c. &c.

Preliminary Observations.

THE Agricultural character of the county of Derby is as varied as its surface, and is to be found in all its varieties, from the rich meads on the banks of the Trent, the Derwent, the Wye, and the Dove, to the scanty herbage on Kinder-scout, Axe-edge, and Combs moss,—and from the productive red marl and gravel, in the arable district, south of Derby; or, from the occasional patches of rich loam, upon the coal-measures more northerly; to the sterile limestone in the north-east, and the cold thin hill sides on the north-western corners of the county. No fixed data can, therefore, be assumed, as characteristic of the agriculture of the whole county; but, on examination, we shall be able to detect a few peculiarities, though chiefly arising from the difference in soil, situation, and climate, before alluded to. Those parts of the county which lie nearly north and south of the town of Derby, present a striking contrast in geographical features; the former abounding in hill and dale, whilst the latter is chiefly flat and unvaried. The southern district is, however, more generally fertile than the other, and the appearance and culture more uniform. With respect to those parts of it which are arable, no general rule can be laid down for the course of cropping; so much will ever depend on the opinion which each occupier entertains of his own knowledge. The necessities of some induce cross-cropping to so great an extent, as to defy all reduction to system, as well as all restrictions by yearly agreement or lease. Indeed, there is a sufficient tie, *with good farmers, in fair times,* to manage well, without restrictions. The hope of self-advantage, the future benefit of children, or other relatives, together with the spirit of emulation, excited by the improvements of neighbours; these, and other motives, combining, would go far to keep up the agricultural spirit of the country. But it is now so long since the capital and industry, employed in agriculture, yielded a fair return, that the patience of the great body of the occupiers of land is nearly worn out; and, but for the feeling of unfitness, in the majority of them, to take up any other business, the relinquishment of farms would, we fear, have been numerous.

It is often the case, with the cultivators of the best arable land, that, as the incentive is not so great, so the exertions put forth, and the capital employed by them, fall short of what are bestowed, where nature has been more niggardly. And if we were to risk a contrast between the two districts alluded to, as to the cultivation of the arable land, we should say, that the occupiers of the more fertile district are not so liberal in the use of adventitious manures, as the less fortunate cultivators of inferior soils. This

remark applies particularly to the Hundred of Scarsdale. There, by means of bones to the spring-fallows, they are enabled to obtain a crop of turnips; and with Peak-lime to their summer fallows, to raise a crop of wheat; and thus they have it in their power to reserve the yard-manure for the grass land. By this mode of management, they are brought nearer to an equality with their brethren of the south, who generally confine themselves to the manure arising from the produce of the farm. The difference lies here:—in the latter case, the additional capital is found by the *proprietor* in the superior quality of the land, and refunded by the occupier in an additional rent; while, in the former, the additional capital is furnished by the *occupier*, in the great outlay required to make his land productive, which is, naturally, much inferior. On this account, however, he pays less rent. To the culture of wheat and barley, and occasionally of beans and peas, the southern district is for the most part applied, as far as respects the growth of grain. Turnips are produced wherever practicable, but chiefly with a view to their being pulled off; the land, generally, not being dry enough to admit of their being eaten upon the ground where they are grown. From the difficulty of obtaining a good crop of turnips, of late years, cabbage and mangel wurzel are much more largely cultivated than formerly. Upon the stronger soils, the practice of naked summer fallows still prevails, and it is founded, we think, in good judgment. Occasionally a crop of winter or spring vetches may be taken; and if the land be previously cleaned and limed, or manured, the preparation for the succeeding wheat crop will be found a good one. Great crops of red clover, and other artificial grasses, are raised; but consumed principally by the husbandry horses. An economical custom has lately been introduced, of *soiling* this part of the farming-stock in the yards, in summer, and *chopping* hay or straw for them in winter. The great features in the southern and western parts of the county, are the dairying and grazing systems, which are carried to a state bordering closely on perfection. Of the truth of this, the demand for, and the high character of Derbyshire cheese, in the London market, and the sea-port towns, afford sufficient testimonials; whilst no town in the kingdom presents a finer show of well-fed butcher's meat, than is weekly exhibited at Derby. In the spring of the year, the markets and fairs, at this place, are distinguished by very great collections of milch cows, supplied from Yorkshire and the north-eastern part of this county; and are from hence dispersed amongst the occupiers of the dairy farms, to a great distance. Nor are the markets and fairs at Chesterfield and Ashbourn, less celebrated for the abundant supply of cattle for grazing, which are brought thither, in great droves, from the north, and thence distributed into the surrounding country, into Leicestershire, and still further south. The quantity of sheep kept in the county is very large, and the southern part may boast of as good flocks, of the improved Leicestershire breed, as any county in the kingdom. And, taking into account the height and bleakness of the hilly parts, and the consequently increased exposure to the severity of the weather, the great improvement in the flocks of sheep in these exposed situations, reflects no ordinary credit on the spirit of the owners. The long-woolled breed of sheep prevails, in this county, to the almost total exclusion of others, except the horned or moorland sheep; of

CHAP. 4. Preliminary Observations.

which (though of late years decreased, in consequence of the inclosure and cultivation of many of the moors) the number is still considerable. For farming horses, Derbyshire, and particularly the Hundred of Scarsdale, has long been celebrated, and furnishes, annually, a considerable number of black colts for the metropolis, and the south of England, where they are well known by the name of Scarsdale blacks. It is to be feared, that the breeding of heavy, or teaming horses, has not been properly attended to of late years; a mongrel race having been too generally substituted, which will bring neither profit nor credit to the breeder. Some years ago this county was famed for possessing many fine herds of long-horned cows; now they are much diminished; and although nothing has been lost to the public, by the introduction in their place, of the improved short horns, yet many persons regret their decline, and it must be confessed that they possessed excellent properties, both for the grazier and the dairyman. Both these descriptions of occupiers, however, having partaken of the advantages derived from putting to the short-horn cows, which this county and the west-riding of Yorkshire did possess, bulls of the purest blood from the north; there is now considerable anxiety manifested to purchase animals still nearer to perfection in breed. All admit the superiority of these animals, on account of their earlier maturity, for the grazier's purpose; and if good milking properties be combined with this excellence, there is no doubt of the breeder being ultimately recompensed for his perseverance, or of a general adoption of the improved short horns. The breed of pigs varies much; but many excellent animals, with qualifications calculated to recommend them both to the farmer and gentleman, are to be met with in every part of the county. Upon some of the moors the improvement, of late years, has been very great, in consequence of the numerous inclosures furnishing a field for the industry of the spirited husbandman; and lands, which before were of the most unsightly appearance, presenting nature in her wildest garb, now bring abundant crops of oats, and in a few instances, of wheat. The removal of surface stones, stubbing, paring, burning, draining, and the free use of Peak-lime have effected this. The difficulties presented by the still higher and more mountainous parts, as well as by the bogs and peat-fields, are not likely, for the present at least, to be assailed by the industry of man. The corn harvest in the Peak is much earlier than formerly, in consequence of earlier sowing, and using seed from warmer districts, and of forwarder kinds. Within the last twenty years we have witnessed whole fields of corn, both standing and in shock, nearly buried in snow, and others that would never come to maturity. Comparatively speaking, little wheat is grown in the Peak, the principal grain cultivated being oats.

On the eastern side of the vale of Scarsdale, commencing near Hardwick Hall, is a narrow strip of land upon the magnesian limestone, joining Nottinghamshire on the east, and Yorkshire on the north. Some of this land is of fair quality; and by the judicious use of bones, and eating the crop of turnips upon the ground, very fine crops of barley, clover, and wheat are obtained. Other parts are so sterile as to be considered not worth cultivation. Although a considerable quantity of limestone is burnt at several places, all differing a little in quality, and carried some miles for use upon

shale and gravel soils, yet a small portion only per acre is applied. If more than half the quantity of what is considered a good dressing of Peak-lime be used, the effects of this magnesian lime are pernicious. The different properties of these two limes have been often illustrated by the effects produced on the after-crop; where a cart load or more of each kind have been deposited in two heaps, and remained some weeks, until in a fit state for spreading upon the land. Upon the place where the Peak-lime lay, the after-crop will be very luxuriant; whilst the after-crop upon the place where the magnesian lime lay, will be sickly and not come to perfection; or, what is frequently seen, will produce no corn at all.

In the vale of Scarsdale the land is of various qualities, as indeed, is usually the case in coal and ironstone districts. Some of it is very good, and some very bad. The same farm, nay, the same field, often contains several different kinds of soil, each of which requires a different mode of culture; and, notwithstanding that the farms are generally small, it is no unusual thing for the occupier to follow grazing, dairying, and breeding, upon his *grass land;* and the different modes of cultivation, as practised in Norfolk or Northumberland, upon the *arable part.* As farming land is of a *mixed* nature and character, (much of it being of an inferior description) and where a variety of systems must necessarily be followed, there are no farmers who excel, generally speaking, those in the vale of Scarsdale.

Amidst so many breeders and farmers of deserved celebrity as this county presents, it may, by some, be considered invidious to select any for particular mention. Yet justice demands that we should record the names of those who stand pre-eminently conspicuous for their encouragement of good farming, and the improvement of the breeds of horses, cattle, sheep, and pigs. The late and present Duke of Devonshire have, for many years, kept stallions for the use of the tenantry and neighbourhood. The late Earl of Chesterfield was a warm promoter of agriculture; and his large farming establishments continued and improved with equal spirit under the present Earl. Sir George Crewe, bart. is a strenuous supporter of the farming interest. So is Sir George Sitwell, bart. Francis Mundy, esq. one of the members for the county. William Palmer Morewood, esq. of Alfreton Hall. Thomas Hallowes, esq. of Glapwell. Mr. Wilson, of Stenson. Richard Arkwright, esq. of Willersley Castle. The Messrs. Strutt of Belper and Derby. William Jessop, esq. of Butterley Hall. W. B. Thomas, esq. of High Fields, through whose exertions the Derbyshire Agricultural Society was established in 1819, and who has ever stood forward as the farmer's firm friend, whether as an introducer of the best breeds of farming-stock, or as a staunch advocate for due protection to the British Farmers. Abraham Hoskins, esq. of Newton Solney. Samuel Rowland, esq. of Derby. Mr. Hassall, of Hartshorn, who has for many years been a celebrated breeder of sheep. Mr. Smith, of Swarkstone-Lows, more recently celebrated as the successor of the late Mr. Bakewell, in his residence at Dishley, near Loughborough, as well as in his great merit as a breeder, which will be more fully shown hereafter. Mr. Webster, of Norton. Mr. Heywood, of Brimington. Mr. Gratton, of Wingerworth. Mr. Gregory, of Longstone. William Carleill, esq. of Longstone Hall. Mr. Greaves, of Bakewell. A. H. Heathcote, esq. of Stonecliffe Hall.

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J. G. Barnes, esq. of Ashgate. E. S. Cox, esq. of Brailsford, and many others. Nor ought we to omit honourable mention of the late Mr. Princep, of Croxall. Mr. Cox, of Culland. Mr. Horton, of Catton, and Samuel Oldknow, esq. of Mellor.

After these general preliminary remarks, for which we are highly indebted to an intelligent agricultural friend, it is necessary to enter more particularly into the minuter circumstances, by which the agriculture of Derbyshire may in some respects be regarded, as distinguished from the rest of the kingdom.—Like all other British districts, the land of this county must in the first instance be considered as divided into possessions

Estates.

or estates. The nature of that ownership will belong more properly to the general and family history of the county; and it will suffice to observe, in this place, that with a few extraordinary exceptions, the ownership of territorial property is not remarkably extensive or unequal. Mr. Farey

Value.

estimates the prices at which estates sold in Derbyshire about fifteen or twenty years ago, at thirty years purchase on the rental. We believe the present prices may be calculated, upon an average, at a much lower rate; although there are recent instances of parcels of land having exceeded this valuation. The price of land necessarily differs, not only with respect to its quality, but its situation. Good land near Derby has been sold at £200. and £250. per acre. Mr. Farey says, that in 1815, the selling price of land about Mackworth was from £90. to £150.: at Kirk Ireton land was sold as low as £90. Newly allotted common-land was purchased about the same period, near Egginton heath, at £80. per acre, and at Hoon two farms on red marl and gravel were sold at the same rate.—Freeholds are

Leases.

far more numerous in this county than copyholds.—Leases were more frequently granted in Derbyshire than they are at present; and perhaps the great fluctuations which have taken place since the war, in the prices of agricultural produce, have deterred tenants from soliciting the advantages which leases are thought to ensure. The Duke of Devonshire grants no leases; but then, by a continued and hereditary liberality, unexampled perhaps in the kingdom, the tenants have been so fully encouraged to confide in the honour of their landlord and the rectitude of his agents, that improvements, costly and extensive, are not unfrequent on farms held under his Grace, by tenants at will.—Leases are granted by the Earl of Chesterfield at Bretby, for twenty-one years; and similar leases are known at Ashover, Dale, Stanton, Hartington and some other places.—The leases of the Earl of Chesterfield's farms require the tenants to plant and protect a certain number of young timber trees. In the verbal lettings at will, there are seldom any other conditions than the carting of coals, repairing of roads, and performing the landlord's statute duty; but even these conditions are not general, and the keeping of a few sporting dogs for the landlord, seems the only claim of a general nature. In covenants or agreements for letting farms, the proportion of land to be in tillage is sometimes mentioned, but throughout the county, it is mostly left to the tenant to break down or lay up any particular pieces of land. In this the Derbyshire farmers possess an advantage over those of the southern counties, where fields are obliged, by clauses in the letting, to be kept in pasture or arable, which would frequently be more profitable in an opposite state.

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Farms.

The farms in this county are mostly of a moderate extent, there not being more than six or seven that exceed six hundred acres, with the exception of some held by the tenants of the Duke of Devonshire in the woodlands of Hope, who have very large tracts of mountain bogs and heathy uncultivated hills, attached to farms which might of themselves be considered comparatively small. There are farms in the Scarsdale Hundred, round Ashover, which average less than fifty acres each; and in the same parish there is an instance of ninety-seven tenants on a rental that barely exceeds sixteen hundred pounds; and such small occupancies are by no means uncommon in other places.

Rents.

The rents of lands near the principal towns are high. Near Derby, it is not unusual for the small tenants who supply the town with milk, to give from 70 to 120*s.* per acre. There are farms which let at 40, 50, and 60*s.* per acre; in Kirk Ireton the average rent is said not to exceed 20*s.* and at Ashover it is about that sum. At Newhaven the new allotments have been let at 10, 12, and more recently, at 16, and 20*s.* per acre.—Upon the whole, the rental of Derbyshire, taking into consideration the extensive waste tracts of the Peak, is below the average rental of all the surface of England and Wales. Mr. Farey observes, that "here and every where else, the major part of the farms are too small for the most perfect management, or the most abundant or cheap produce being brought to market." He adds, "the disposition, laudable in itself, which English land-owners have for preserving the same tenants or families on their estates, seems carried to a mischievous excess, in great numbers of instances. The tenants, in several places, are said to leave the occupation of their farms to their widows or children, &c. by will, with as much confidence as if it were their own estate, or held on a long lease; and that a custom of long standing prevails with the noble owner* and his agents, of entirely respecting such bequests, except on very particular and rare occasions."—We differ entirely with the intelligent surveyor upon this important subject, because in his very doubtful views of utility, he would destroy that example of confidence between the owner and his tenants, which is at once honourable to the illustrious landlord, and beneficial to the county. It would be well if such tenures were much more prevalent; nor can it be doubted, that agricultural improvements will be extensive where the occupant can rely so strongly on the moderation and integrity of his landlord. —There are differences of opinion also, relative to the superior benefits derivable by the public, from large farms. Mr. Pitt, in his history of Staffordshire, very justly intimates that small farms should be composed of grass-lands chiefly, and occupied by a dairy of cows, well-managed, and that the tillage should be with the spade. Undoubtedly farms of larger size are best adapted for raising grain for the supply of the public market, but the true system is to have farms of all sizes—thus "employing and encouraging the industry of the working farmer, and the capital of the more opulent"—and this is the case in Derbyshire as much or more than in any other county.

Cottages.

The cottagers throughout Derbyshire are much better provided with habitations than they commonly are in the southern counties of England,

* His Grace the Duke of Devonshire is here particularly alluded to.

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and the cottages are more frequently white-washed and have a more comfortable appearance. The rural cottages are here particularly meant, as there will be occasion hereafter to mention the extensive accommodations for the working-people at the numerous and important manufactories. Some of these rural cottages are attached to farms, particularly at Culland and at New-Haven; and, notwithstanding the writings of our modern economists, we cannot but agree with Mr. Farey, who says, "it would be well for the country, if such were far more numerous than at present." Such an opinion from an intelligent enquirer, who, in all he says concerning population and the poor, is a professed advocate of the Malthusian system, is highly valuable; and we quote the following paragraph to show that his notions of a rural cottage are not alarmingly liberal. "However desirable it may be, that farmers should keep a cow, on reasonable terms, for the most deserving of their stated labourers, residing on or near their farms, yet the impolicy of suffering commons to remain uninclosed and in a state of total neglect, like that of Hollington and others, for the sake of cottagers' cows, is strikingly apparent, and *so would be the favourite schemes of some persons, of allotting them one or more pastures in common.* Under the baneful influence of the poor-laws, but few cottagers will be found provident enough to purchase a cow, and fewer still perhaps, who would long keep one that was given or provided for them by others. The less business of his own, that a labourer has, which should cause him at any time to leave his regular employ, and be his own master, the better for his habits, his family and his country. A garden, as large as he can cultivate at over-hours, and his family and his pig can consume the produce of, has, after much observation, seemed to me the proper extent of a labourer's occupancy of land. Milk, the farmers might and ought in general to furnish to the labouring poor, and at a cheap rate to their own labourers, without their keeping cows. After I had been at Cromford,* I heard of a *cow society* having existed there, I believe among the cottagers, but the precise nature and objects of the same I am unacquainted with."

Tithes.

A considerable proportion of land in this county remains subject to tithes, while a fixed composition has been beneficially established in some parishes. Farmers are seldom willing to attempt improvements where tithes are to participate in the returns for their expenditure; and it has been observed, improvements have been most extensively made on composition-lands, or where the farmers have obtained leases of the tithes. A very beneficial practice is gradually increasing among the opulent land-owners, of obtaining leases of tithes from the clergy and lay-impropriators, in order to re-let them to their tenants, at fixed compositions. It has been usual in some parts of Derbyshire for the clergy to have a survey made annually previous to harvest, and for charges at certain rates per acre to be made on each occupier; but more frequently, the surveyor, on the part of the clergy,

* At Cromford is a society of rather a singular kind, instituted by the owners of cows, to insure against loss attending that kind of property. The cows belonging to the members are valued twice a year, and each person pays monthly, at the rate of one penny per pound, in proportion to the value of his stock. Whenever the fund of the society amounts to £40. the payments are discontinued, till it is reduced below that sum; and when any member's cow dies, he is indemnified to the full extent of its worth. *Beauties of England and Wales.*

Note.—This society still exists, and its consequences are said to be highly beneficial. *Editor.*

agrees with the principal occupant or occupants for a gross sum, which is left to be adjusted at a parish meeting.* Tithes upon improved or newly inclosed lands have been the subject of much complaint. The earliest inclosures by Act of Parliament, in this county, provided for the tithes by allotments of land: but, strange to say, in the more modern acts the lands to be inclosed are left subject to tithes: the evil of this was felt, and, in some instances, the tithes have been commuted in land.† CHAP. 4. Tithes.

The poor's-rates, county rates, and parochial rates, generally, as they affect the profits of the farmer, might be noticed in this place: but they will more correctly come under financial statements, which belong as well to the trading as to the agricultural interests of the county, and which will be given in a subsequent chapter. Rates.

The variety of soil in this county has already been mentioned, and we shall therefore proceed to enumerate the implements of husbandry chiefly in use, and the modes of cultivation mostly in practice. Implements.

The ploughs used in Derbyshire are of various kinds, but, perhaps, the most prevalent are the wheeled-ploughs. These are either single or two shared ploughs, and vary in price from two to ten pounds. Double or two-furrow ploughs answer very well on light soils, but they are not much in use. The single wheeled plough is an excellent implement, requiring no person to hold or touch it, except when turning at the end of a furrow.—Swing ploughs, drawn by two horses a-breast, and guided by a ploughman chiefly with reins, are sometimes used, but the wheels are thought to add greatly to the draught.‡ There are also double boarded moulding-ploughs for potatoes and other drilled crops, which have been found to be very serviceable implements. Trench-ploughs for open drain work are made at Hathern-turn, but covered drains are now so much preferred, that these powerful implements are falling into disuse. Ploughs.

Harrows of the old form are still in use, but the double harrow consisting of two, and sometimes of four small oblong harrows hooked together, is acknowledged to be a serviceable implement, and we have seen it frequently at work in the south of the county. At Bradley park, there are bush-harrowing machines, mounted on two low wheels in front, and these are loaded with weights in the middle, according to the degree of pressure of the thorns behind. Harrows.

Rollers of wood and of stone are used in different parts of Derbyshire, with occasional, but no very remarkable peculiarities of construction.—Drilling is not practised so extensively as in the neighbouring counties; but on some farms the improved drills are made use of.—Horse-hoes and Rollers, &c.

* Upon the general view of the subject, Derbyshire pays less in direct tithes than the average of other counties. The amount of tithes in this county, according to the property-tax returns, was, in 1811, only 7¼*d.* and a small fraction more in the pound, upon the total rental of the county; so great a part of the rental being on exonerated lands, on houses, &c. The average of tithe throughout England and Wales, was, at the same period, 1*s.* 7*d.*

† At Beighton, the tithes are paid by a fixed commutation in corn.

‡ The wheels have been much improved by the addition of an iron flay, firmly screwed to the coulter, which, in ploughing leys, takes off the turf and turns it into the furrow, where the plough immediately covers it with earth; by this management, a turf at one ploughing has the appearance of a fallow, and harrows nearly as well: this ploughing requires no additional trouble, but the strength of an extra horse, and the flay may be used or not, at pleasure. The common swing plough, without wheels, is used to plough hedge sides, ill-formed corners, or any difficult work, when both a holder and driver are required. *Pitt's Staffordshire.*

CHAP. 4. Implements.

scufflers need no particular description, but it may be stated, that on some of the strong lands in this county, ploughing and scuffling have been preferred to harrowing.—Thrashing machines have increased considerably of late years, and the most recent improvements have in some places been adopted; and the chaff and straw cutting machines are pretty generally in use.

Carriage of Produce.

In the Peak and Scarsdale districts, pack-horses were anciently used for the conveyance of produce, ore, &c. across the moors and dales. These were succeeded by cumbersome wains drawn by oxen; and there are old men now living about Ashover, who remember the time when there was neither cart nor wagon in that parish. The use of wagons is more general in the southern plains, while carts have become common in the hilly parts of the county. These High Peak carts are drawn by two, three and even four horses, and are furnished with a strong drag chain, fastened to the top of the hind part of the cart: the horses have strong breechings and belly-bands, and on arriving at the top of a steep hill, the carter takes off all his trace horses, and hooks them to the drag chain behind; and it is surprising to observe, with what safety and ease, after a little training, the horses succeed in letting loaded carts down most tremendously steep hills, on which it would be unsafe to trust a one-horse cart with an adequate load.—One-horse carts, with cast-iron cylindrical wheels, and capable of carrying 35 cwt. are found very advantageous in the coal and iron districts. —The wagons mostly in use, are either with six inch wheels or narrow wheels. The former are kept by the larger farmers, and are drawn by six horses, two-abreast. The narrow wheeled wagons carry from two and a half to three tons.

Other implements of agriculture differ in no respect from those used in other counties. The large drag-rake, with tempered teeth, for raking after the cart in hay and corn harvest, is now in general request.—Strong weeding scissars, with handles two and a half feet long, for clipping through the roots, are in use; and so are a kind of weeding-tongs with fluted jaws. Stacks of hay and corn are supported on stands, sometimes of stone and sometimes of cast-iron.

Inclosures.

Inclosures.—The extensive moors and waste tracts of land in this county rendered it a particular object of the inclosure acts, and consequently these inclosures have been very numerous. Scarcliff and Palterton have been mentioned as the first parliamentary inclosures in England: the act for that purpose was obtained early in the last century. On the coal-measures in Palterton, many fine oaks were felled about ten years ago, which were planted in the hedge-rows at the time of the inclosure, and there is remaining a fine produce of hedge-row timber in the yellow lime in Scarcliff, which was undoubtedly planted at the same time.

The complaints of injury done to the poor by inclosures are not much insisted on in this county. Mr. Farey observes, that these complaints have seldom been founded in justice or reason, and that they proceed not from the owner of a cottage or common-right, but from some tenant-at-will who paid little or nothing for the cottage he inhabited. In the recently inclosed lands in Derbyshire, there are small allotments on which clusters of a few comfortable cottages with appropriate garden-grounds are

seen, and which have certainly a far superior aspect, when compared with the old cottages and their occupiers on the skirts of some of the remaining wastes.

The chief error respecting inclosures, particularly in this county, is the neglect of stipulations with the tithe owners,* settled previously to the application to parliament, and enforced by the act. The expenses attending inclosures are very great. It was estimated that Hollington common, by division and allotment only, would require a sum to be raised amounting to much more than ten pounds per acre, and the expenses of 280 acres of allotment in Kirk Ireton actually amounted to ten pounds per acre, although there was but one commissioner employed.

The reservation and adjustment of mineral rights on inclosures, were matters of considerable importance in this county: and in the Hartington act, we find that the coal, ironstone, and all other minerals except the lead-ore, which belongs to the crown, were reserved to the lord of the manor, who is to pay damage (assessed by arbitration) for any detriment occasioned to the occupants of the allotments, by his mines.—This is the usual provision; but in the Stretton or Winfield act, it is declared, that if pits and roads are disused for twelve months, they may be broken up and levelled, the expenses to be repaid by the lord of the manor, and that no land shall again be "entered and broke up under pretence of getting coal, after the same shall have been once worked, cleaned and levelled as before." There are some similar clauses in other acts, which may be regarded as hurtful to the interests of the miners and coal owners.

Fences.

Fences, gates, &c.—It is desirable to divide newly-inclosed lands, as much as possible, into fields with parallel sides, and to separate the varieties of soil. These plain maxims are too much neglected. Wall fences are very general in the Peak hundreds, and are certainly well adapted to such situations. The stone is procurable with little labour, and a wall fence is no sooner finished, than the full benefit of it is reaped, either for the protection of crops or shelter of cattle. Mr. Farey justly reprehends the futile attempts to raise hedges in such situations. "On Bramley moor, in Eckington," he observes, "where, though excellent stone abounds, beauty, or some such weighty motive, has dictated quick fences instead of walls." On Bakewell moor he saw two low stone walls, raised at a distance from each other in order to plant a quick between them.—Wall fences are usually built of uncoursed rubble, five feet high, with a nine-inch coping of stones, for boundaries; and four feet and a half, with the same coping, for intermediate fences. The cost for getting the stone and building the wall, is from 6*s.* to 10*s.* per rood, of seven yards in length. At Ashover, Beeley and other places, long straight stones, cleaved from the loose blocks of millstone grit, are set upright in the ground, like pales, close to each other, and form a very complete and durable fence. In some of the stony districts, white thorns have been planted and suffered to grow up as dwarf trees, for shelter to the cattle and for ornament. The white thorn or haw-

* Previous to the inclosure, the tithes of Hartington were worth £120. a year, at the most: the tithe-owner (it is said) sold the allotment made to him in lieu of tithes for £28,000. when ring-fenced, making an advance of £1280.—*(Farey.)*—In the Ashover inclosure act, 600 acres of the best of the commons were made subject to immediate tithes.

CHAP. 4. Hedge-row Timber.

thorn *(mespilus oxycantha)* is very generally preferred for hedges, and it has been observed, that bank-set quicks, with a northern aspect, succeed much better than those with a southern aspect. The quick-set hedges about Brailsford and Ashbourn have been repeatedly noticed for their neatness, closeness and beauty: they are entirely of white thorn. The great enemies to good hedges are weeds, woodbine or honey-suckle *(lonicera periclymenum,)* wild hops *(humulus lupulus,)* traveller's joy *(clematis vitalba,)* the blackberry brier *(rubus fruticosus)* and other creepers.—The crab-tree *(pyrus malus)* is less planted in hedge-rows here than formerly, on account of the destructive effects of the caterpillars that breed on them. On the south of Derby there are several very handsome crab hedges; and the farmers, in that neighbourhood, gather their crabs and send them to persons who keep rollers and presses for making verjuice.—Black thorn *(prunus spinosa)* and the bullace tree *(prunus insititia)* are never planted in new hedges; and the holly *(ilex aquifolium)* is less cultivated in hedges than it ought to be. The magnesian limestone is a soil which seems suited to this plant. At Rowlee in Hope-woodlands, the sides of the hills abounded formerly with holly pollards, which were lopped in severe winters for the sheep, with good effect.—Privet *(ligustrum vulgaris)* flourishes very much in all parts of the county, but particularly on the yellow limestone. Elder of both kinds *(sumbucus nigra and alba)* are not unusual in hedges. Birch *(betula alba)* is found in considerable quantities in some moor hedges, where the soil is not calcareous.—Alder *(betula alnus)* is met with in similar situations, and, of late, the bark has turned to good account for dying. Sallow *(salix caprea)* seems to spring spontaneously, in poor, pared and burnt lands, on the limestone or on the waste heaps of lime quarries.—The mineral limestone of Derbyshire seems particularly favourable to the ash *(fraxinus excelsior)* as is indicated by the names of many of its towns and villages.—The maple *(acer campestre)* and the hazel *(corylus avellana)* are found in hedges throughout the county.

Amongst other species of hedge wood, may be noticed the Dishley or Huntingdon willow *(salix alba,)* which is said to have been first introduced into England by Mr. Robert Bakewell of Dishley-farm, in Leicestershire. It is cultivated in small patches or strips by the fences, and is considered a very serviceable tree, on account of the quick growth, the straightness, lightness and durability of the wood, when used for poles of various kinds. It is now common in the meadows on each bank of the Trent.

In the leases under the Earl of Chesterfield, there are generally introduced clauses, compelling the tenant to plant and take proper care of trees on the banks, hedge-rows and corners of fields and meadows: the trees so planted being sets of "good young oak, beech, ash, elm and sweet-chestnut;" and the limited number is usually five trees annually to every ten pounds of yearly rent.—It has however been observed by many judicious planters and farmers, that ash, elm and poplar are injurious to the quick-sets, and that the oak, larch, Scotch fir, beech and sycamore, are preferable to others as hedge-row trees.

Gates.

Gates.—In the stony districts of the county, substantial stone stoops or posts for gates are in general use. Anciently the gates in the Peak hun-

dreds were formed and hung without any iron-work, and some of these yet remain in Birchover and other places: a large mortise-hole is made through the hanging post, perpendicular to the plane of the gate, at the height of about four feet and a half, into which a stout piece of wood is firmly wedged, projecting about twelve inches before the post; and in this piece of wood, two augur holes are made, to receive the two ends of a tough piece of green ash or sallow, which loosely embraces the head of the gate in the form of a bow, while the bottom of the head of the gate is formed to a blunt point, which works in a hole made in a stone, set fast in the ground, close to the face of the post. It is easy to see, by the mortise-holes in all old gate stoops, that this mode of hanging gates was once general.—Great improvements have been made recently in the construction of gates, and cast-iron gates have been brought into common use in many parts of the county. CHAP. 4. Gates.

Tillage.—Estimates have been made, specifying that not much less than four-fifths of the surface of Derbyshire is in grass; but it seems to be admitted, that the arable land has very greatly increased during the last thirty years. Formerly, in ploughing, six horses were often employed here as in other counties, and these have actually been seen, at length, in a field of only three acres extent; but, of late years, the two-horse ploughs, without a driver, have come into very general use.* Oxen, as has been observed, were formerly much used in ploughing at Ashover, but were long discontinued until lately, when they have been introduced by some experimental farmers. The Earl of Chesterfield works several Hereford and Devonshire oxen, and there are oxen used at Calke, Chatsworth, Hartshorn, Locko and Foremark. Mr. Radford, at Great Hucklow, keeps four teams of spayed heifers in regular work, and he calculates on considerable savings by the practice. Tillage.

The system of periodically fallowing land, the benefits of which many agriculturists have denied, has still its adherents in Derbyshire. The number of naked fallows is, however, comparatively few; turnips, cabbages and other green crops having become very general. Some experienced farmers in this county continue to consider the fallowing system superior to any other on the red marl; and it has been estimated, that every fifth field of arable land is fallowed each year, on the coal measures about Alfreton.

Mr. Pilkington says, that formerly the land in the neighbourhood of Appleby was employed chiefly in tillage; but that since the open lands were enclosed, the business of the dairy has been more attended to.

Every mode or course of husbandry must necessarily be subject to changes, according to the improvements introduced, and the views of the particular landlords and tenants; but such changes have not been very considerable in this county. The author just mentioned, who wrote about forty years ago, gives the following course of husbandry, as that which was then the most common:

* "On the 23rd of August, 1810, a bet was decided, on one of Lord Waterpark's farms, in Doveridge, of a Norfolk plough drawn by two horses, without a driver, and a four-horse plough with a driver: the four horses in two hours and a half ploughed almost an acre, the two-horse plough, not quite so much; but from the comparative ease to the horses, and the goodness of the work performed, the decision of the umpires was in favour of the Norfolk plough. *Farey*, Vol. II. page 95.

CHAP. 4. Tillage.

"After breaking up the grass land, it is customary, he observes, to sow

Oats,	Oats,	Oats,	Oats,
Wheat,	Wheat,	Wheat,	Wheat,
Barley,	Fallow,	Fallow,	Beans,
or,	Turnips,	Wheat,	Fallow,
	Barley,	Barley,	Barley.

"Sometimes (he adds) after oats and wheat they fallow in the winter, and then have a crop of barley or beans. But I believe it is an universal practice, when the last crop is taken, to sow grass seeds, which are either clover or rye grass, or both. It is usual, after having completed the above courses, to suffer the land to lie two or three years for pasture. However (continues Mr. P.) this kind of management is not extended to all their lands. Some are never broken up. This is more especially the case with those which lie near the banks of the Trent. These are constantly kept for pasture; because it is thought that better cheese is produced by the natural than the cultivated grasses."*

Mr. Farey, whose second volume was published in 1815, arranges the courses of cropping pursued in this county, under three heads, which may be rendered more distinct and useful by throwing them into a tabular form.

1. Courses without *green-crops.*

1. Fallow,	1. Fallow and turnips,	1. Fallow with lime,
2. Wheat,	2. Oats,	2. Wheat,
3. Beans or oats,†	3. Wheat,‡	3. Oats on part, and beans.

1. Fallow,	1. Fallow, with 150 bushels of lime per acre,
2. Wheat,	2. Wheat,
3. Oats,	3 & 4. Oats.‖
4. Beans,§	

2. Courses which have *no successive corn-crops.*

1. Fallow and Swede turnips,	1. Fallow,
2. Barley, with red clover,	2. Wheat or beans, with red clover,
3. Clover,¶	3. Clover,
	4. Oats or beans.**

* Pilkington, Vol. I. page 290. † On the common or open fields, at Hollington.
‡ This is on limestone at Bakewell.
§ At Stanton, and on the clayey parts of the farm, the beans are sown after the wheat.
‖ At Over-Haddon, and Mr. Farey says, that where such courses are tolerated, he was not surprised to hear that some tenants to the ancient park at Haddon, had, since it was disparked and let, reaped six or seven white-strawed crops in immediate succession; the tenants maintaining, that the thick crops they got smothered all the weeds, and rendered a fallow or green-crops unnecessary. In Barlborough common-field, on the yellow lime, Mr. Farey heard that seven successive crops had been taken.
¶ At Markeaton. ** Mr. T. Bowyer's farm at Waldley.

1. Fallow and turnips,
2. Barley or spring wheat and seeds,
3. Seeds,
4. Oats,*

1. Fallow, with Norfolk turnips,
2. Barley and seeds,
3. Seeds mown,
4 & 5. Seeds pastured with sheep,
6. Oats sown broadcast in one furrow.†

1. Fallow, with manure and lime,‡
2. Barley or spring-wheat and seeds,
3. 4. 5. Seeds,
and 5 or 6. Wheat, harrowed in,§

1. Fallow,||
2. Barley or wheat, with seeds,
3. Seeds mown,
4 & 5. Seeds fed,
6. Wheat or oats.¶

1. Fallow and turnips,
2. Barley and seeds,
3. Seeds mown,
4 & 5. Wheat, barley or oats,**

1. Fallow,
2. Spring-wheat and seeds,
3. 4. 5 & (sometimes) 6. Seeds,
6 or 7. Oats or barley.††

1. Fallow,
2. Wheat,
3. Fallow and turnips,‡‡
4. Barley and seeds,
5 & 6. Seeds,
7. Tares,§§

1. Fallow with Breedon and Ticknall lime, and turnips,
2. Barley and seeds,
3. 4 & 5. Seeds,
6. Oats,
7. Wheat.|||

3. Successive corn-crops, with green-crops.

1. Fallow,¶¶
2. Barley, with seeds,
3. Seeds,
4. Wheat,
5. Oats, with sometimes peas or lentils,

1. Fallow, with Swede-turnips,***
2. Barley or spring-wheat, with seeds,
3. Seeds mown,
4. Seeds pastured,
5. Wheat dibbled or sown broadcast, on one ploughing,
6. Oats on two or barley on three

ploughings, one of which is done in autumn, the others in the spring: the crop drilled and hoed.†††

* Hoon-Hay, the farm of Mr. Thomas Harvey.

† At Bretby, on light gravelly land, by Mr. F. Blaikie, bailiff to the late Earl of Chesterfield.

‡ Ten loads of dung, and one hundred and sixty bushels of Ticknall lime per acre, laid on in the autumn, if the land is clean: but if much cleaning is required for the land, the lime only is laid on in the autumn, and the dung previous to sowing the turnips: part of which are drawn, and the remainder fed on the land, the proportion of them being regulated by the comparative fertility of the turnip field. § At Ingleby farm.

|| With two hundred bushels of Ticknall lime, and twenty three-horse cart loads of dung for turnips. ¶ Farm of Mr. Smith, at Foremark park. ** Farm of Mr. Hassall, Hartshorn.

†† Ingleby farm, (late Mr. Brown, now occupied by Mr. Smith, jun.)

‡‡ In the Northumberland drill or Scotch-row culture.

§§ At Chatsworth. ||| Croxall, at the farm of Mr. Garman.

¶¶ This is chiefly on sandy lands, where the soil is formed from the second grit rock, as at Dethick in Ashover; and the fallow is in this manner: plough first in November, and after three or four spring-ploughings, rakings and picking the twitch, about one hundred or one hundred and twenty bushels of lime, which had been previously laid in heaps in the field to slack, is laid on in May or early in June; then, in the last week of June, turnips (the white round) are sown: these are twice hoed, and the crop is usually eaten off by sheep. Swede-turnips have been tried, bu for want of earlier sowing than is practicable on such lands, they failed.

*** The Swedish turnips are in rows twenty inches apart, the ground having been well pulverised, cleaned and manured, with one hundred and twenty-eight bushels of Ticknall lime or dung.

††† At Bretby (Earl of Chesterfield's) under the management of Mr. Francis Blaikie.

CHAP. 4. Tillage.

1. Fallow, limed with one hundred and twenty bushels from Ticknall, for turnips,	1. Fallow,
2. Wheat or barley, with seeds,	2. Wheat,
3. Seeds,	3. Oats,
4. Wheat,	4. Seeds,
5. Oats,*	or,
	1. Fallow and turnips,
	2. Barley or oats
	3. Beans.†
1. Fallow, with one hundred and forty bushels of Ticknall lime, and about fifteen or twenty tons of dung, laid on and spread separately before sowing turnips,	1. Fallow,§
	2. Barley and seeds,
	3. 4 & 5. Seeds,
	6. Beans or oats,
	7. Wheat.‖
2. Barley, with seeds (the barley sown broadcast and harrowed in)	1. Fallow,
3 & 4. Seeds,	2. Barley and seeds,
5. Oats,	3. 4 & 5. Seeds,
6. Wheat,	6. Beans drilled,
7. Barley,‡	7. Wheat broadcast.¶
1. Fallow,	1. Fallow,
2. Barley, with seeds,	2. Barley, with seeds,
3. 4. 5. and sometimes 6. Seeds,	3 to 12. Seeds,
6 or 7. Oats or beans,	13. Oats or beans,
7 or 8. Wheat, manured,**	14. Wheat.††
1. Fallow,	1. Fallow, dressed with lime,
2. Barley and seeds,	2. Barley and seeds or wheat,
3 to 9. Seeds,	3. Seeds mown, and aftermath eaten,
10. Wheat, harrowed in,	4. Seeds, manured in the spring,
11. Oats,‡‡	5 and sometimes 6. Seeds,
	6 or 7. Wheat or oats,
	7 or 8. Barley or oats.§§

* Repton, farm of Mr. John Smith.

† Sudbury, seat of Lord Vernon, under the management of Mr. Thomas Brain.

‡ Farm of Mr. John Pearsal of Foremark.

§ On the lighter parts, dressed with fifteen cart-loads of dung, and ten bushels of Ticknall lime, per acre. ‖ At Barrow-fields, the farm of Mr. Robert Lea, of Walton.

¶ On the farm of Mr. T. Lea, at Stapenhill. The fallow is dressed with about two hundred bushels of lime: three bushels and a half of barley were sown, and five quarters reaped: the same quantity of beans were sown, and the produce averaged four quarters. About a third part of Breedon magnesian lime is preferred, with two-thirds of Ticknall lime, on strong red marl.

** At Lullington, the farm of Mr. Thomas Moore. †† At Hono hill, in Chilcote.

‡‡ Loscoe Farm, in Repton. The fallow is dressed with Ticknall lime and rotten dung for turnips, which are fed off. The turf is here much infested with the red wire-worm and white grub.

§§ These courses have been the practice of Abraham Hoskins, esq. of Newton Solney. The fallow is dressed with one hundred and thirty bushels of Ticknall or Crich lime. The arable land is never dunged except when in seed: it being the opinion of this able agriculturist, that the manure, in fallowing, sinks below the roots of the corn, and that a great part of it is lost by exposure on the surface. The turnips sown are generally, if not always Swedes.

1. Fallow for turnips,
2. Barley and seeds,
3 to 7. Seeds,
8. Oats or beans, harrowed in,
9. Wheat,*

1. Fallow, dunged for turnips,
2. Barley and seeds,
3 to 7. Seeds, sometimes mown,
8 & 9. Oats.†

1. Fallow,
2. Wheat, harrowed in,
3. Seeds mown,
4. Wheat,
5. Pease, tares or oats,‡

1. Fallow, with Crich lime,
2. Wheat, with clover harrowed in during March,
3. Seeds, mown and the aftermath fed,
4. Wheat,
5. Oats or pease.§

1. Fallow,
2. Wheat,
3. Clover, mown, or,
3. 4 and sometimes 5. Cow-grass,
5 or 6. Wheat,
6 or 7. Beans,‖

1. Fallow,
2. Wheat or barley, with seeds,
3. Clover,
4. Wheat, manured with forty bushels of soot in March,
5. Beans, pease or oats.¶

1. Fallow, with dung or lime,
2. Wheat,
3. Barley, with seeds,
4. 5 & 6. Seeds,
7. Oats,
8. Beans,**

1. Fallow,
2. Wheat,
3. Barley and seeds,
4. 5 & 6. Seeds,
7. Beans or oats.††

1. Fallow,
2. Wheat,
3. Barley or oats, with seeds,
4 & 5. Seeds,
6. Oats,‡‡

1. Fallow,
2. Wheat,
3. Barley and seeds,
4. 5 or 6. Seeds,
6 or 7. Beans or oats.§§

* At Sawley, the farm of Mr. Thomas Jowett, sen. of Draycott.

† At Over-Haddon, at Mr. Bennett's farm.

‡ Farm of William Jessop, esq. of Butterley Hall, Pentrich. The fallow is dressed with two ploughings and harrowings, and sometimes more: between hay and corn-harvest, Crich lime is laid in large heaps on the field, at the rate of from twelve to fifteen bushels per acre. It is slacked and spread in the middle of September, and is immediately ploughed. Sometimes eighteen or twenty loads of yard-dung is spread on the lime before ploughing. Red clover is sown in the spring, and sometimes rye-grass with it. On the coal-measure soils, oats have been sown even after this course; but this custom has been justly abandoned of late years.

§ At the farm of Mr. H. Fletcher, of Killis in Horsley. In this neighbourhood the farmers were accustomed only to roll the wheat; but Mr. Fletcher finds, that harrowing earths up the wheat, and prevents the land baking. He ploughs twitchy lands but once.

‖ This course is that practised by Samuel Rowland, esq. of Mickleover: he fallows with either one hundred and sixty bushels of Ticknall or one hundred and twenty-five bushels of Turnditch lime, with twelve or fifteen cart-loads of yard-dung. The produce of his wheat is on an average thirty-two bushels to an acre. With the wheat, fifteen pounds of clover or cow-grass is harrowed in during March or the beginning of April. He estimates, that five bushels of beans produce twenty-four bushels.

¶ At Ilkeston, the farm of Mr. Samuel Cocker. The fallow is half for wheat, with one hundred and twenty bushels of Crich lime per acre: and half for turnips, with twelve cart-loads of rotten manure or town-soil in addition to the lime. His turnips are half common and half Swede; the crops carted off to grass-land, for sheep or for beasts in stalls.

** At the farm of the late Thomas Princep, esq. of Croxall.

†† Burrow Fields, Walton, the farm of Mr. R. Lea.

‡‡ At the farm of Mr. John Holland, of Barton-fields.

§§ At the farm of Mr. Matthew Webb, of Donkill-pits, Catton.

CHAP. 4. Tillage.

1. Fallow,
2. Wheat,
3. Barley and seeds,
4 & 5. Seeds,*

1. Fallow, without lime,
2. Spring wheat, winter-ploughed, and not sown before the 15th of April, with 12 lbs. of red clover,
3. Clover mown, manured with yard-dung in March,
4. Wheat or oats,
5. Fallow,
6. Wheat,
7. Beans, after winter-ploughing and clover,
8. Clover,
9. Wheat or oats.†

These courses of cropping may be concluded by the following account of the mode practised by William Smith, esq. at Foremark park, upon thin soil.

Break up for oats. Skerrify and harrow two or three times over each field until the land is perfectly cleansed. Limed invariably. Dung or compost used when they can be procured. Plough once. Drill the wheat in. Invariably soot the whole, in March or April, with from five to six quarters per acre.——After wheat, beans drilled at twenty-two inches: horse-hoed until July; once hand-hoed afterwards. This is considered an excellent preparatory crop for Swedish turnips, the succeeding year. After turnips, the land is laid down with barley and seeds; viz. ten pounds of red clover, four pounds of white, and one peck of rye-grass, per acre.—Seeds mown, and the succeeding year or two, pastured with sheep and cattle.——In wet drooping seasons, this mode is deviated from, and wheat is sown after the bean crop with manure or compost, and found to answer occasionally.

Mr. Smith uses the Scotch ploughs with wheels, and works them with two horses a-breast. This gentleman farms six hundred acres, a great proportion of which is arable, with fourteen horses, which are employed in drawing all his manure, soot, lime, &c. as well as on the labour of the farm. His men have ploughed a six-and-thirty acre field, with six horses, in a week. Mr. Smith reaps annually sixty acres of wheat, fifty or sixty of barley, and gathers as many of turnips.

Having thus detailed the most remarkable courses of crops, practised by a few of the leading agriculturists of the county, it will not be uninteresting to state the kinds of grain mostly cultivated, and the average produce per acre of the principal sorts.

Wheat.

Wheat.—The cultivation of this important grain is said to be rapidly increasing, even upon the higher parts of the Peak Hundreds. In the southern parts of the county, where the red marl stratum extends, the wheat is abundant, and generally of a very superior quality. Very fine wheat is also grown in the lower parts of the Hundred of Scarsdale, and on the yellow lime on the eastern borders of the county.—The advantage of having seed from the southern and more early districts of the kingdom, is well understood by the farmers of Derbyshire, and much seed-wheat is annually procured from Dunstable in Bedfordshire. The quantity of seed

* At the farm of Mr. William Garman, of Persal Pits, Croxall.

† The improved mode of cultivating his land, as practised by John Webb, esq. of Barton Lodge.

sown varies very considerably, and the produce has been estimated at eight, ten or twelve-fold, with regard to the quantity of seed: but we find it stated, that Mr. Joseph Butler of Norbrigs, sowed one season one bushel of seed, and had a produce of thirty bushels of wheat.—The red and white varieties of autumn wheat *(triticum hybernum)* are chiefly cultivated in this county. Other kinds, as the bearded blue cone wheat, have been tried with tolerable success: this species is found to be less affected with mildew than any other, and the produce is calculated to be from thirty-six to forty bushels per acre.—Spring wheat *(triticum æstivum)* is very extensively grown, and the general average of its produce is about thirty or thirty-two bushels per acre, each bushel weighing sixty-six and a half or sixty-seven pounds.—A mixture of corn-crops, called *Blend-corn,* is not uncommon in the hilly tracks of the Peak and Scarsdale Hundreds: this arises from sowing wheat upon barley or oat stubbles, and is a good deal practised about Alton in Ashover. Sometimes when the wheat plants are thrown out of the ground by the frosts in the winter, barley is sown to thicken and make up the crop.—Among the distempers to which wheat crops are subject, the *mildew* is the most prevalent. It is thought that the warm and moist weather which frequently precedes the ripening of wheat in the narrow valleys is productive of mildew, and it has been customary to employ men at that season, in the close valleys, to walk up the furrows, brushing the dew off the ears of the wheat as they proceed.—The wire-worm is found to commit considerable depredations, particularly in the southern districts of the county: and a white thin grub, with a yellow head, infests the mossy pastures, particularly at Ingleby and Loscoe farm.

Wheat.

Rye.—There are not many instances of rye *(secale cereale)* being cultivated as a regular crop in Derbyshire. It has been grown by Mr. Smith, of Foremark, with dills or winter tares, for soiling his horses.—We noticed, in the summer of 1828, a luxuriant crop growing at Sinfin moor, on a farm belonging to Mr. Peach of Normanton.

Rye.

Barley.—This grain *(hordeum vulgare)* is cultivated in almost every part of the county: at Beighton this grain is reaped and tied up in sheaves like wheat; and at Yolgrave, and even at Over-Haddon, fine crops of barley have been produced, that ripen early enough, notwithstanding all that has been said to the disadvantage of the High Peak climate.—The large species of winter barley has been cultivated at Wingerworth, with indifferent success. A black variety of winter barley is grown at Overton and other places, and this grain is said to be held in much estimation by the maltsters. The Corsican, or naked barley, has been found very productive on the gritstone soil, but it is thought not so useful for the maltster as the common grain.—The usual quantity of seed-corn is three bushels per acre, and the produce is from thirty-two to forty bushels. A single barley-corn, accidentally sown in a field of spring-wheat at Barton lodge, in 1808, produced eight ears, with two rows of sixteen each, or two hundred and fifty-six grains in the whole.—Barley is very little used for bread in Derbyshire, but the malt and ale of the county are held in considerable estimation.

Barley.

Oats.—The common oats *(avena sativa)* are generally regarded as a serviceable crop. On the hills in Ashover, and most other parts of the

Oats.

CHAP. 4. Oats.

county, the oats are reaped and tied up in sheaves, and the shocks or sheaves hooded, by opening and reversing some of the sheaves, to act as thatch to the others.—Black oats are a good deal cultivated. The American, or potatoe-oat, has been found to produce from seventy to eighty-four bushels per acre, weighing forty-nine pounds each bushel: but on poor land this species degenerates very fast, and the straw becomes unfit for cattle. The Holland oats, or short-whites, have been long in use, as well as the Poland oats, which are regarded by some farmers as a very valuable variety.—Oats vary in their rate of produce, according to soil and seasons, more than any other grain. The quantity of seed sown is from four to six bushels per acre, and the crops are usually from thirty-six to fifty-six bushels.—Oat bread or Haver-cake is the food of a large portion of the Derbyshire peasantry. The people who deal in oatmeal are called *swalers* or *mealmen*. In making oatmeal, the grain is kiln-dried and stripped of the husk at the shealing or shelling mills. It is then ground, and eight pounds of meal is about the average produce of fourteen pounds of oats.—The Haver-cake is mixed in a wooden tub called a doshen; and, during the winter months, a little of the batter is left in the doshen in order to excite the fermentation of the next batch: in summer time the doshen is slightly washed out with cold water after each baking, the tub itself being sufficiently sour to raise the next leaven. In making this sort of bread, the batter, somewhat thicker than that which is used for pancakes, is poured on the bakestone or on a cast-iron plate, in some houses, and is spread with the back of a wooden ladle to about one-fourth of an inch thick, and sixteen or eighteen inches in diameter. Each cake is baked in about six or seven minutes on an iron plate, but on the bakestone, two or three minutes more are requisite.

Pease.

Pease are not extensively cultivated in Derbyshire, and *beans* are said not to ripen on the very hilly parts of the county; they thrive however in the middle and southern districts. Dibbled beans are very common about Longford, and in the neighbourhood of Wirksworth: this pulse is also cultivated in the same manner at Bretby, Chaddesden and Persal Pits. Beans are found to ripen a fortnight earlier if their tops are cut off with a short sharp scythe. Generally speaking, beans, in this county, are esteemed an uncertain crop: and on the same kind of land, without any ascertainable cause, the crops will differ from twelve to thirty bushels per acre.

Tares, &c.

Tares and *lentils* are cultivated as green crops for the soiling of cattle. *Buck-wheat* is sown in patches for the feeding of pheasants and other game.

Turnips.

Turnips.—This important root is much attended to in Derbyshire. In the southern districts, turnips have been sown on the stubble of early oats with considerable success. On the enclosure of Brassington common, on the fourth lime rock, thin paring and burning was generally practised; and one hundred and sixty to two hundred bushels of lime spread per acre on the ashes, as a preparation for turnips, after one thin ploughing only, sown in the last fortnight of June.—On the coal-measures on the slope of Bolsover hill, bone dust has been considered essential to the obtaining a good crop of turnips. The sorts usually cultivated are the white-top, the green-top and the globe turnip. The Scotch yellow turnips have been sown at Bretby, but they are not much known in Derbyshire.—In this county, as in most others, the far greater part of the turnips are eaten off the

land by sheep and lambs. Some farmers draw part of the crop for their young stock, for their milking cows, or for those in the straw-yard. Samuel Rowland, esq. of Mickleover, gives his fatting cows common turnips until Candlemas, and Swedes after that period.—It has been proved by experience, that early-sown turnips stand the frosts better than those which are sown later. Turnips sown on newly-limed lands hold their colour and keep much sounder in winter.—The *ruta baga* or *Swedish turnip* is highly esteemed and extensively cultivated. Stiff land, in the red marl district, has been found very favourable to its growth; and even on the stiff coal-measure soil, recently drained, good crops have been obtained. Turnips.

Mangel Wurzel is cultivated in small quantities by many farmers of this county. It was first introduced about twenty-five years ago, and is now generally approved where the land is suitable to its growth. Mr. White of Chaddesden states it to be excellent food for milking cows, given in moderate quantities. Cattle and horses are fond of this root. Mangel Wurzel.

The value of the *cabbage (brassica arvensis)* in aid of the turnip crop, during deep snows and hard frosts, is generally understood throughout Derbyshire.* The drumhead and the Scotch are the prevailing sorts. Cabbages constitute a good winter food for sheep and neat cattle. They have been given to dairy cows with very good effect on their milk. The late earl of Chesterfield had a machine for cutting the stalks of cabbages into slices, which in that state are easily eaten by the stock; and Mr. F. Blaikie, his lordship's bailiff, calculates that the stalks contain one-sixth or one-seventh of the nutrition of the plant. The late Mr. W. Cox once grew a field of cabbages on red marl in Brailsford, that averaged thirty pounds weight each.—The ten-thousand-headed cabbage or tree cabbage, has been cultivated with tolerable success. Cabbage.

Carrots.—This excellent root *(daucus carota)* has latterly obtained much attention as an agricultural crop. The red marl has been thought not favourable to its growth, but carrots are now grown with success at Ravenstone, Belper, Blackwell, Lullington and Hargate Wall. Carrots are given to horses with good effect. Carrots.

Potatoes.—This excellent root *(solanum tuberosum)* is widely and carefully cultivated in Derbyshire. It is said to have been first grown in this county at Baslow, so late as 1768, but since that period ample quantities have been raised here not only as human food, but also for the support of cattle. Darley Dale is remarkable for the fine crops of potatoes produced there, and those produced in the neighbourhood of Ashover and Windley are much esteemed.—The bomb-rennet or Irish potatoe is the species which is chiefly cultivated at Ashover. The red potatoe is valued on account of the length of time during which it will continue sound and serviceable, but the ox-nobles seem most generally in use among farmers.—The disease Potatoes.

* "The practice of the late Mr. Francis Bruckfield, on the limestone shale at Alton, was rather singular, in growing cabbages *ten* years successively on the same piece of land: in which he told me that he followed the practice and recommendation of Mr. Anthony Tissington of Bonsal, and manured with stable-dung the first year, a smaller portion the next year, and used a very small quantity only in each succeeding year, and yet found no abatement in the goodness of his crop, a circumstance which was confirmed to me by Mr. William Wallis, his bailiff. The cabbages were pulled up, and carted whole to the yard or pasture selected for consuming them, and not cut off standing as usual." *Farey's Survey.*

CHAP. 4. Potatoes.

called the *curl* is said to have scarcely ever made its appearance in Darley Dale. Over-manuring is often the occasion of the *curl*, and those sorts that ripen earliest are observed to be the most subject to this disease. The rate of produce has been calculated to be between four hundred and six hundred bushels per acre.* It is very doubtful whether potatoes are useful as food for cattle, although there are instances of cattle thriving upon this kind of food. They are certainly much more nutritious if boiled or steamed and mixed with chopped straw or chaff. Small boiled potatoes, oatmeal and cheese whey, is a good food for bacon-hogs. The early kinds of potatoes, in general estimation for culinary use, are early kidney, Fox's seedling, cockney, manley, Sutton's king and walnut-leaved. The late kinds for winter use are red round, pink ox-noble, blue ox-noble, farmer's glory, American ranger, Irish ranger, rainbow, late kidney, white blossom and blues.

Alternate Husbandry.

ALTERNATE HUSBANDRY has during the present century become a subject of such importance, particularly in a county where the dairy constitutes so large a proportion of every farm; and we shall consequently make no apology for abstracting and abridging the following interesting and scientific remarks from the excellent work of Mr. George Sinclair, F.L.S. F.H.S.

The grasses and other plants best fitted for *alternation*, as green crops with grain, are such as arrive at perfection in the shortest space of time or within the compass of two years: such as have their leaves broad and succulent and do not quickly run to seed. Plants of this description are supposed to produce the greatest weight of herbage at the least expense to the soil. It is a curious and well-known fact, that any species of plant that has continued until its natural decay on a particular soil, cannot be immediately reared with equal success on the same spot until some other crop intervene; but that a different species of vegetable will there succeed better, for its peculiar period of life, than it would on a soil naturally better adapted to its growth, where plants of the same species had just attained to perfect maturity. This holds good with respect to annual plants as well as to those that continue to live many years; but it is better seen in the former, as their habits and duration in the soil are oftener and more directly within the reach of common observation. On this antipathy of plants seems to depend *the theory of alternate cropping with green-crops and grain*, which remains in principle the same, although it may vary in particular instances according to the circumstances of soil and climate.—On analyzing a soil immediately before and after producing an impoverishing crop, the results of such analysis do not point out any diminution of the weight or proportion of its constituents sufficient to account for the weight of the vegetable matter produced. The decomposing annual, and other vegetable matters in the soil, are the only constituents wherein a sensible loss is perceived.

The following analyses are the results of daily practice and observation in the garden and farm.

MANGEL WURZEL OR WHITE BEET *(beta cicla)* produces upon a suitable soil or deep rich loam, on an average, 25 tons of green food per

* In the spring of 1787, Mr. George Evans, gardener of the late Sir J. Banks, at Overton, cut a single *ox-noble* potatoe into 64 sets, and dug therefrom in the following autumn 64 pecks of potatoes, which weighed 263 lbs. avoirdupois.

acre; and the proportion of the whole bulk to the nutritive matter is as $14\frac{1}{18}$ to 1, or the quantity of nutritive matter is ·0677.

Carrots *(daucus carota)* produce upon a deep light loam, on an average, 11 tons; and the proportion of the whole bulk to the nutritive matter is as $7\frac{9}{10}$ to 1, or the quantity of nutritive matter is ·1284.

Potatoes *(solanum tuberosum)* produce upon fresh loam of intermediate quality as to moisture and dryness, on an average, 15 tons per acre; and the proportion of the bulk to the nutritive matter is about $5\frac{3}{4}$ to 1, or the quantity of nutritive matter in any given weight is ·1736.

Common Field Turnip *(brassica rapa var:)* on a good yet sandy loam will produce on an average, 16 tons per acre; and the proportion of the bulk to the nutritive matter is 18 to 1, or the quantity of nutritive matter in any given weight is ·0555.

Swedish Turnip or Ruta Baga *(brassica rapa var:)* produces on a favourable soil or a strong loam, on an average, 13 tons per acre; and the proportion of the bulk to the nutritive matter is $13\frac{1}{11}$ to 1, or the quantity of nutritive matter in a given weight is ·0763.

Cabbages *(brassica oleracea var:)* are fond of a rich strong loam, on which they will produce on an average, 25 tons per acre; and the proportion of the bulk to the nutritive matter is $13\frac{1}{4}\frac{7}{3}$ to 1, or the quantity of nutritive matter in a given weight is ·0746.

Kohl Rabi *(brassica oleracea var:)* produce on a rich strong loam, on an average, 14 tons per acre; and the proportion of the bulk to the nutritive matter is $13\frac{2}{7}$ to 1, or the quantity of nutritive matter in a given weight is ·0729.

Now if we estimate the exhaustion of the soil according to the quantity of nutritive matter drawn by each species of plant, on an acre or any other space of ground, we shall find the following to be the proportion in which they stand with respect to each other, as to their powers of producing nutritive matter, and the consequent exhaustion sustained by the land.

	Nutritive matter.	*Tons per acre.*	*Proportion of production and exhaustion.*
Potatoes	·1736	15	2·604
Cabbages.....	·0746	25	1.865
Mangel Wurzel	·0677	25	1·692
Carrots	·1284	11	1.412
Kohl Rabi	·0729	14	1·0206
Swedish Turnips.....	·0763	13	·9919
Common Turnips ...	·0555	16	·8888

But though these plants take, from the ground in which they grow, nutritive matter in the above proportions, it is not to be inferred that they actually impoverish the land in an equal ratio. Plants receive nutritive matter of one description from the atmosphere, which they conduct to and impart to the earth, while they draw nutritive matter of another description from it; hence arises the value of many green-crops in the alternation system of husbandry. The same species will seldom thrive upon the *fœcula* or deposits of a preceding crop, but these *fœcula* or deposits may become nutritive matter to a different species. It has been asserted, that

CHAP. 4. Alternate Husbandry.

while the effect of some plants is only to impoverish the soil for an immediate succession of the same plant, others have the property of completely exhausting the land, so as to render it but feebly productive of any other kind of vegetable. This seems so contrary to the known laws of nature, that it only serves to prove how very defective is our knowledge in the important science of succession-plantation. What one species of plants rejects or deposits as *fœcula* may be converted into mucilage, saccharine matter or gluten by the vital processes of a plant of a different character.

Pasture and Meadow-Land.

Pasture and Meadow-Land.

In Derbyshire the proportion of land kept in pasturage is very considerable. The high ground in the northern districts is better adapted to pasture than to the cultivation of corn, and in the southern parts dairy or cheese farms are very prevalent. This excess of grass-land does not seem to have been so remarkable in former times, for much which is now undisturbed pasture or meadow, appears to have been ploughed at some distant period; for, even the grassy parts, or *white-lands* (as it is called) which are interspersed among the heathy moors, show traces of the plough.

We have already spoken generally of the soil of Derbyshire; but so important are the grasses in the husbandry of this county, that many persons will expect of us, in this place, a few words more in detail respecting this matter.—The diversity of soil held here either in pasture or meadow comprises every species.

Diversity of Soil.

1. Poor silicious sandy soil.
2. Silicious or hungry sand.
3. Heath-soil or black silicious moor-soil.
4. Rich silicious or sandy soil.

The two last of these differ from the two first chiefly with regard to the quantity of decomposed vegetable matter contained in them. On a clayey sub-soil they are productive, but when the sub-soil is porous the produce is inconsiderable.

5. Sandy loam.
6. Rich black clayey loam.
7. Clayey loam.
8. Tenacious clay.
9. Rich alluvial soil, partly formed by depositions from flowing water.

This is the most productive in the superior grasses of all the grass lands.

10. Vegetable mould. 11. Fertile peat moss. 12. Barren peat moss.

Mr. Sinclair, in his valuable work, states, that seeds of all the grasses, peculiar to each soil, were sown by him on beds of soil each of one of the above characters. The seeds of the different grasses vegetated on all the soils except the last, the inert peat, which continued completely barren. In the ensuing season, the different degrees of luxuriance of the same species of grass on different soils were remarkable. The superior grasses, or those which constitute the produce of rich, old pasture lands, formed nearly a convex ridge of grass, beginning at the poor silicious soil, where they were

Diversity of Soil.

the most diminutive, until they reached the bed of rich alluvial soil; and afterwards decreased in quantity of produce until they terminated in the inert peat. After the second year this order of luxuriance did not continue in the same proportion. The rich silicious sandy soil, in the fourth and fifth year was greatly inferior in produce to what it was in the second and third, and the produce of the poor silicious sandy soil decreased annually in quantity after the second year. The produce of the sandy loam and of the clayey loam continued much the same; but the rich alluvial soil and rich clayey loam increased in quantity of produce until the fifth year; and even afterwards the diminution was trifling, although no manure in any instance was applied.

Grasses, &c.

The grasses, together with those broad or narrow-leaved plants which constitute the natural produce of pasture-lands, are *twenty-six* in number; and will be found enumerated in our sketch of the Botany of the county.

Meadows.

Lands that are mown in the summer are called *meadows;* an opinion prevails in Derbyshire, that it is better to appropriate particular grass-fields as meadows, and to mow them successively, than to change them. *Low meadows* consist, for the most part of alluvial flats, extending to a considerable width on both sides the Trent, the Dove and the Derwent. The accumulated loam or sandy loam, which is the sediment left by floods upon the gravel, is from one to several feet in thickness, and is generally without the admixture of stones or other heavy bodies. Some of these flats are very rich land, particularly those which form the meadows along the lower course of the Dove. In general the low meadows of this county are kept in, what farmers term, a clean condition; but sedge or tussock grass, docks, thistles and wild tansey greatly abound. The *upland meadows* are said to be much injured by earth-heaps thrown up by worms.

The laying or shutting up meadows for hay is, in Derbyshire, called *hayning*. This takes place early or late in April, according to circumstances. In the Peak, the hay-harvest usually begins about the first of August; and at Hartington, Buxton, &c. sometimes much earlier. The hay-time, in many parts of this county, is considered of more importance than the corn-harvest, and is generally called the *hay-harvest*, and often, in the dairying districts, the *harvest* without other addition. As rainy weather prevails very generally during July and the commencement of August, in the Peak Hundreds, it seems injudicious to delay the mowing in expectation of a heavier crop; for, if the first fine weather in July were embraced, the succeeding rains would increase the *aftermath* with a greater degree of profit, than they do the grass standing for hay, after it has formed its flower stalks, and, frequently, its seed.—In very steep and small inclosures, hay continues here to be carried to the stack, by a method called *stanging*. Stangs are poles or long levers, and on the middle of two of these stangs, a large cock of hay is carried, by two men. Corn crops, from similar situations, are also *stanged*.—The *stacking* of *hay* is practised in a very neat manner generally throughout Derbyshire. The hay-stacks in Bretby park are ventilated, by means of upright chimneys in the interior of them. There is a hay-barn at Locko park, and in other places, with small openings between the bricks to admit the air or allow the escape of the steam.—The salting of hay was formerly much practised about Bake-

CHAP. 4. Meadows.

well and Buxton, but it never was very usual in Derbyshire. The *produce* of hay, from the low meadows in the Wye, has been estimated at 30 cwt. per acre, of that from the hill-pastures at from 18 to 20 cwt.—From the earlier gritstone soils and the shale lands, the crop has been reckoned from 34 to 40 cwt. The general growth varies considerably in different parts of the county.—The *rowen* or *eddish after-grass,* is consumed by dairy cows or by sheep.—The expense of *mowing grass* varies from half a crown to three or four shillings per acre, with generally a gallon of small beer and a quart of ale.

Pasture Land.

On the western, or rather south-western district of Derbyshire, there is much excellent pasture land, as well as in the more southern parts. The soil in the coal-measures inclines much to clay, and draining with the application of lime seems to be essential to the proper occupancy of a farm in the coal districts. There is, however, very good pasture land on the southern coal-measures, resulting probably from alluvial deposits.

Farming Stock.

The *stocking* of pasture land has been much studied by some of the Derbyshire graziers. Much advantage, it appears, may be derived from a judicious mixture of sheep with cattle, with the introduction of horses, and occasionally ley beasts, so as to follow as each sort of stock is changed from one pasture to another. Sometimes it happens in a county of such diversity of soil, that every description of land is met with in the same or neighbouring closes. Except in the Woodlands about Hope and some of the moors of Scarsdale and the High Peak, there are no lands exclusively appropriated as sheep pastures. *Dairy grounds,* or those appropriated to cheese-making, prevail chiefly on the red marl and mineral limestone soils; and it seems a general opinion, that old sward answers better for dairying than artificial grasses or lands newly laid down, though clean and luxuriant in growth.

Through a considerable part of the limestone tract in the Peak Hundreds, it is common for the farmers to set apart large pasture fields, for the taking in of summerlings or ley cattle, at fixed prices per week. Gentlemen's parks, in many instances, admit ley cattle. The period of the year for such admission is usually from Old May-day to Old Michaelmas-day, and the terms for that period differ considerably.

Description of Stock.

In the farms of Derbyshire, where, as has been already remarked, the grazing and dairy branches of agriculture are so prevalent, the cows, cattle and sheep become objects of attention. Of the cow-stock for the purposes, there are *breeds* called the *new Derbyshire long horns;* but these as well as the other kinds of cow-stock, have been introduced from other places.

The old long-horn breed was originally from Lancashire or Westmoreland. This useful sort of cows for the dairy prevailed very generally in the county until the beginning of the present century; but it has subsequently declined. Mr. Wilson, of Stenson, has continued to keep this stock unmixed with any other.

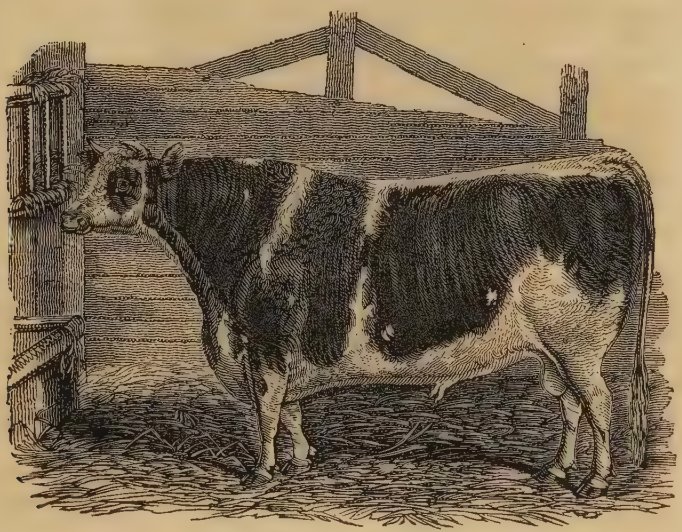
The short-horn, also called *Holderness, Yorkshire* or *Durham cows,* are brought to the fairs at Derby and other places in the county, and many are bred here. Most of the principal farmers, as well as the agricultural nobility and gentry, have paid much attention to this description of stock; among whom we may mention, the Earl of Chesterfield, Sir George Crewe,

bart. Sir George Sitwell, bart. Mr. R. Needham of Longstone, Mr. W. B. Thomas of Boythorpe farm, Mr. Smith of Swarkstone-Lows, &c. &c.

The following are some distinguished animals of this celebrated breed.

1. A beautiful bull, called Charles the Second, on account of his being a son of Mr. Mason's famous bull Charles, was the property of W. B. Thomas, esq. This fine animal obtained the first prize given by the Board of Agriculture for the best bull in the United Kingdom, at Aldridge's Repository, London, on the 9th of April, 1821. The prize was a silver cup, with the following inscription:

"9th. April, 1821. The *Board* of *Agriculture* to *W. B. Thomas* of *Chesterfield, Esq. For the best pure short-horned Bull exhibited at the Board's Cuttle Show, this day, called King Charles the Second.*"



This Bull was slaughtered at Chesterfield, on the 19th of December, 1821; he was five years old, and his dimensions, weight, &c. were then taken; viz. live weight, 1 *ton* $2\frac{3}{4}$ *cwts.* or 182 *stone*, 14 *lbs.* to the *stone*; $318\frac{1}{2}$ *stones*, 8 *lbs.* to the *stone*; 127 *scores*, 8 *lbs.*

Dimensions taken whilst living.

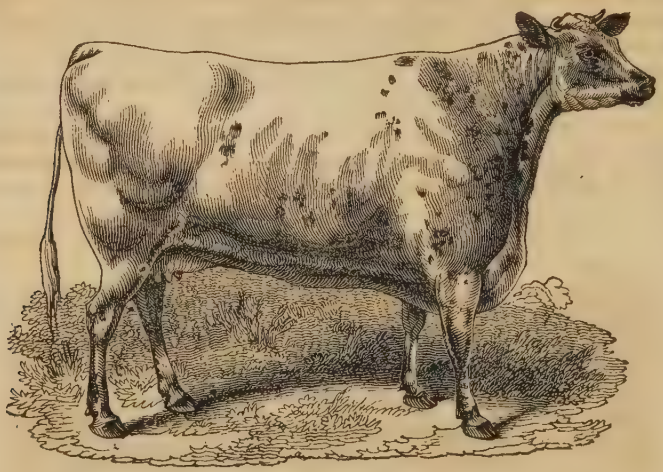
Height, 15 *hands* 3 *in.* or 5 *ft.* 3 *in.*
Girth behind the shoulder, 8 *ft.* 8 *in.*
—— before the shoulder, including the bosom, 9 *ft.* 2 *in.*
—— round the neck, behind ears, 3 *ft.* 11 *in.*
—— of his fore-leg, below the knee, $8\frac{3}{4}$ *in.*
—— of his hind-leg, below the hock, $9\frac{1}{2}$ *in.*
Length from the front of his shoulder to the root of his tail, 6 *ft.* 4 *in.*
——— from root of horn to root of tail, 7 *ft.* 9 *in.*
——— from his huggin or hip bone to the root of his tail, 2 *ft.* 1 *in.*
——— from huggin to hock, 3 *ft.* 5 *in.*
——— of his horn, 1 *ft.*
When standing quite straight, and on even ground, the distance between his hind and fore-feet was exactly the same as his height.

Dead weight, weighed two days after slaughtered.

	st.	*of* 14 *lb.*	*st.*	*of* 8 *lb.*	*sc. lbs.*
Exclusive of offal ...	114	8	200	4	80 4
Inside fat, including 28 *lbs.* of loose fat round the heart	15	6	27	0	10 16
Hide and horns	10	11	18	7	7 11
	st.	*lb.*			
Heart	0	10			
Head	2	3			
Tongue	1	0			
Feet	2	0			
Pluck, liver, &c.	3	1	9	0	15 6 6 6
Blood, entrails, &c. about one-sixth of live weight	32	3	56	3	22 11
	182	0	318	4	127 8

CHAP. 4. Description of Stock.

Daffodil, the beautiful heifer represented in this print, was bred by W. B. Thomas, esq. At twenty-one months old, her live weight was 90 *st.* 7 *lbs.* at 14 *lbs.* to the stone; or 158 *st.* 3 *lbs.* at 8 *lbs.* to the stone; and was sold as a show-beast, for 50 guineas.



The *Dishley Steer* was the property of William Smith, esq. of Swarkstone-Lows, by whom it was bred and fattened. When two years and eleven months old, this fine beast was slaughtered by Mr. J. Radford, at Derby, at the Christmas of 1823; and the weight was, carcass 1380 *lbs.*; inside fat 193 *lbs.*; hide 89 *lbs.* This animal has been considered as an astonishing instance of the early maturity of the improved short-horned breed.

A fine short-horned cow, represented in this print, called *Lady*, was also the property of the same skilful and enterprising gentleman. She was sold, when fat, for upwards of £120.

W. Smith, esq. was the chief purchaser of this breed at Colling's sale, at Brampton in Durham, in 1818. He gave 621 guineas for the famous bull, called *Lancaster,* still in his possession; and bought the beautiful cows, *Trinket* and *Venus,* at 143 and 195 guineas. In 1827, Mr. Smith made a general sale of his short-horned stock, and obtained the sum of £4000. for the most estimable animals, which were purchased by the Earl of Chesterfield, Sir George Crewe, bart. and several other eminent breeders.

The *new long-horn,* which is also called the new Derbyshire, was originally from Craven in Yorkshire, afterwards improved by intelligent graziers in Westmoreland, and was introduced into this county by the late Thomas Princep, esq. of Croxall, and Eusebius Horton, esq. of Catton. This breed was also much encouraged by Thomas Coke, German Pole and L. P. Meynell, esqrs.; and is now possessed by E. S. Cox, esq. of Brailsford, Mr. Yates of Ednaston, Mr. Wilson of Stenson, and several other gentlemen. Mr. Yates milks forty cows of this description regularly, and states the average produce of each to be 4½ *cwt.* of cheese yearly. The long-horned cows, when fat, average from 7 to 12 score pounds per quarter, and sometimes more. The late Mr. Princep, of Croxall, paid very great attention to this breed, and an ox from his pastures was fattened at the Marquess of Donegal's, in 1794: weight of the four quarters 1988 *lbs.;* tallow 200 *lbs.;* hide 177 *lbs.* The stock of the late F. N. C. Mundy, esq. which consisted of this breed, was sold in 1808 for upwards of £1093. It contained forty animals, of different ages; and had not the weather been extremely severe during the day of sale, these fine animals would have fetched much higher prices. A bull, called *Sweet William,* which was purchased at this sale for £84. won the prize at the Derby cattle show, on the very next day.

The pure *Devon breed* is a useful species of cattle, but not generally cultivated in this county. It is stated that Devon bulls thicken in the neck during the month of March, in the manner that bucks do in October. The late Earl of Chesterfield kept cows of this breed, and raised some labouring oxen; and Edward Coke, esq. of Longford, reared many bullocks of this description.

The *Hereford* or *middle-horn* breed was introduced by Edward Coke, esq. of Longford. An Hereford ox, called *Merriman,* belonging to the late Earl of Chesterfield, when slaughtered, in 1802, weighed, carcass 1235 *lbs.;* hide 136 *lbs.;* tallow 180 *lbs.*

The *Scotch,* the *French* or *Alderney,* and the *Welsh breeds,* are fed in the county by various eminent graziers, but they are seldom bred, unmixed, by any of our Derbyshire farmers.

At Sudbury park, a breed called the *White breed,* was formerly kept; and some of these white cows had black ears, with a tuft on their heads. They were very gentle and good milkers, and it was thought that they originated in the Holderness breed. The young cows often prove barren. The late W. D. Lowe, esq. had a few of these white cows and a white bull.

A *cross-breed between the long-horns and short-horns* has been attempted, and some breeders have expressed it to be their opinion, that a cross between a long-horn bull and a short-horn cow, is preferable to any other

CHAP. 4. Description of Stock.

stock; yet if this breed be continued the descendants degenerate. Milking cows of this cross-breed are kept by Abraham Hoskins, esq. of Newton Solney, Mr. Yates of Ednaston, and several distinguished dairy-farmers.

Another cross-breed between the old and new long-horn cattle, has been tried in this county, and been found to be hardy, with a propensity to fatten, and generally good milkers.

A cross-breed, between the long-horn and the Devon, was found by the late Earl of Chesterfield to be the next best milkers to the short-horns: the former giving twenty-eight quarts of milk at three milkings, and the latter twenty-nine quarts.

A cross-breed between the short-horn and the Devon, resemble very closely the Hereford or middle-horn breed; is hardy, good feeders, and the meat is of excellent quality. The weight of butter from five quarts of milk, taken from cows of the short-horn breed and cows of the two last-mentioned cross-breeds, was found to stand in the following proportions: short-horn, 7 *oz.*; cross of Devon with the long-horn breed, 8 *oz.*; cross with the short-horn, $8\frac{3}{4}$ *oz.*; thus proving the superior richness of the milk of this breed. The quantity of milk is, however, much smaller.

Of the other cross-breeds we may confine ourselves to the mention of that between the Devon and the Alderney or French breed. These are a valuable stock of moderate size, and the cows are particularly admired for their symmetry of form: they have a great propensity to fatten, even on indifferent food, and the meat is succulent and fine-grained. An heifer of this breed, belonging to the late Earl of Chesterfield, was slaughtered in 1809, weighing, carcass 972 *lbs.*; tallow and rough fat 150 *lbs.*; hide 69 *lbs.* This animal was from an Alderney cow by a Devon bull, and was calved in May, 1805, and kept in store-order until April, 1808: when, not proving a breeder, she was put to grazing. During the following winter, she was kept on hay and turnips, and in the summer and autumn of 1809, was fed on clover, hay, turnips, grains and ground buck-wheat. The grain of the meat was fine, and a more perfect carcass was never seen. The bone of the leg girted three inches and seven-eighths below the knee, and the same below the hock.

Another *Brethy heifer*, of the same breed, of which we give an engraved portrait on the preceding page, was calved in June, 1806, and slaughtered on the 15th of December, 1810.

Description of Stock.

Her measurement when alive was as follows:

	ft.	in.
Height at the shoulder	4	6
Length from the nose to the root of the tail	10	0
Girth behind the shoulders	9	0
Girth of leg, below the knee	0	7

Weight when slaughtered.

	lbs.
Carcass	1040
Loose fat	175
Hide and horns ...	75
	1290

Cattle in the Peak Hundred must necessarily depend upon *hay* for their food, during many weeks of the year. In 1807, there was snow more or less upon the ground about Matlock, from the 1st of the previous November until the 30th of April, and farmers on the Dove-pastures foddered their cows during twenty-nine weeks. We have mentioned the roots used for the food of neat stock. Oil-cake is not much esteemed in this county. —The summer food of neat cattle is natural grass and the sown or artificial grasses. A few dairies experience great advantage by the early or spring use of watered or irrigated grass.—*Soiling* or summer stall-feeding has been recommended by the practice of Samuel Rowland, esq. of Mickleover, who considers this method beneficial not only as economizing food, but as preventing the injuries sustained from the gad-fly in the summer months.*

Around Derby, Chesterfield and other large and populous towns, there are numbers of cows kept; and their milk is sent twice a-day, in conical tin cans, carried in carts, or slung on the sides of asses or horses, for the supply of the inhabitants.—Cows are kept at Duffield and Mellor for the supply of the cotton-mill hands and other work-people; and throughout the Glossop district, where operatives are employed in between fifty and sixty manufactories, a large proportion of the grass-land is appropriated to the produce of milk and butter. Much of the grass-land on the northern side of Scarsdale supplies Sheffield with the same articles. Milk is usually sold at about 2*d.* per quart; but butter varies in price from 1*s.* to 1*s.* 6*d.* or 1*s.* 8*d.* according to circumstances.

Cheese.

Cheese is the most important article in the economy of a Derbyshire farm. Poor land is thought to yield the fattest cheese, though in smaller quantity, than the better soils; but this poor land is confined to the limestone districts. Old sward generally affords more and better cheese than grass upon lands that have been ploughed. Dairy cows, kept upon artificial grasses, are seldom found useful in a cheese-farm. Nevertheless there are farmers of a different opinion, and the advantages derivable from a change of crop are found to counterbalance the objections alleged against fresh grasses. The produce of cheese from each cow is from 2 to 5 *cwt.*

The Derbyshire cheese is mostly of a good quality, yet the method of making it varies considerably, the general mode is as follows: "When the milk is sufficiently cold, (the colder it is, when put together for making cheese, is here considered the better) enough rennet is put to it to make it

* It is an ancient custom with the Vernon family, at Sudbury, to buy and keep two bulls in the park, to be killed and given to the poor of the place, on Old Christmas-Day.

CHAP. 4. Cheese.

come in an hour. It is then stirred, or broken with the hand very small, and left to settle about thirty minutes; then the whey is got from the curd as much as possible, and the latter gathered into a firm state in the cheese-pan. A vat is then placed over the pan and the curd broken *slightly* into it, and afterwards pressed by the hand in the vat whilst any *crushings* will run from it; a small quantity of the curd is then cut off round the edge of the vat and broken small in the middle of the cheese, which, after a little more pressing is turned in the vat, and the same method of cutting the edge off is again observed; afterwards, a clean dry cloth is put over and under the cheese in the vat, and it is consigned to the press for one hour. It is then again turned in the vat, and pressed ten hours, when it is taken out and salted on both sides. If the cheese is of the weight of twelve pounds, a large handful of salt is used for each side. Afterwards it is again put in the vat, wrapped in another clean dry cloth and carried back to the press, where it is kept two or three days, but turned every twelve hours; the last time it is turned it is put into a dry vat, without a cloth, to take away any impressions. This kind of cheese is in perfection at a year and a half or two years old. To keep it clean and make it look well, it is rubbed, while soft, twice a week with a linen cloth: and afterwards, once in every week or fortnight with a hair cloth." In some dairies, when the curd is broken into the vat, it is reduced as much as possible, that the cheese may be rendered more sound. Its quality is mild, and its taste resembles the Gloucestershire. About two thousand tons are supposed to be sent annually to London, or exported from the sea-ports on the east coast. A good dairy farm produces nearly four hundred weight of cheese from each cow within the year. The cheese is always made from the new milk, so that the quantity of butter obtained is inconsiderable, and mostly made from the whey, which is all set up for cream, and gathered into large earthen cream-pots every twenty-four hours. It is afterwards boiled twice or thrice a week: and in some dairies, to keep it as sweet as possible, is removed into clean vessels once in three days. In other dairies this precaution is not taken, as the cream is thought best when sour. A small quantity of milk-cream is then gathered to the whey-cream, and both are churned together; the butter produced is not considerably inferior to the real milk butter.

Selling of Cheese.

Selling of cheese.—Since the making of the Trent and Mersey, the Derby and the Erewash and other canals, the trade in this staple commodity of Derbyshire farming has been much changed, and is now principally conducted as follows, viz. at several of the wharfs on these navigations, large cheese-warehouses have been built, and an experienced person appointed as the clerk of each, whose business it is to receive the cheeses from the farmers' teams, who deliver them at appointed times, rejecting and returning any which are cracked or damaged, or not sufficiently dried; and to stack up, and from time to time to turn and rub, and attend to the stock under his care, taking out all such as crack, or show symptoms of decay, to be disposed of in the neighbourhood for present consumption; and when the factors or dealers, on whose account the cheeses are sent in, make sales or contracts for quantities of cheese, it is the business of these clerks to see that none but perfect cheeses, and such as will bear the carriage, are weighed

or sent off from the warehouses: by which means the uniformity and credit of the commodity is upheld, and all parties seem benefited.

Selling of Cheese.

Several cheese factors reside in Derby, and others in the county; some of these buy large quantities annually, principally on commission for London dealers, or for those who have the government contracts. In the month of August the factors usually travel round the county, and call on the small dairy-men, to examine their cheeses, made from two to four weeks before the time of this visit: and after feeling the latter-made cheeses, and tapping several of the earlier ones, if the dairy be new to them, they usually bargain for, and mark those cheeses that they accept. Some small dairy-men, being obliged to sell for want of money, generally accept the prices thus offered by the factors, and within two or three days after, they usually deliver it at the warehouses at Derby, Shardlow, Horninglow, &c.; where it is weighed, by the long-hundred of 120 *lbs.* and a check given for it by the clerk; with these men it is a ready-money trade, though some few give six or eight weeks credit. Many of the larger farmers send their cheese into the factors' warehouses without any stated price; such prices being subsequently fixed by *the prices* at Derby St. Luke's fair, in the middle of October, or others at Burton, &c. before or after this period. Prices have varied from 82 to 48*s.* per *cwt.* within the few last years.

Sheep.

Sheep.—It is probable that Derbyshire was formerly stocked with four distinct breeds of sheep, only the first of which remain to this day, in their original situation and numbers, viz. the *Woodland* sheep, the breeding flocks of which, still extend over the gritstone and shale moors in Yorkshire and Cheshire, which adjoin to the mountainous district in the north of this county, called the Woodlands. The large tract of land over which this breed is spread, remained nearly to the present time in its original and unimproved state, and the breed of sheep without any attempts to alter or improve it, until that in 1810, His Grace the Duke of Devonshire, introduced several Merino rams into his Woodlands of Hope, with a view to improve the quantity and quality of his tenants' wool.

On the high limestone district, which adjoins south upon that abovementioned and extends south-west into Staffordshire, there was, while a state of common generally prevailed, a second breed known by the name of the *Old Limestone* sheep, but which, since the inclosure of the commons, have almost entirely given place to dairy cows, or to more useful varieties of sheep. In all the southern parts of the county, where no natural distinction prevailed between its soil and climate, and those of Leicestershire adjoining, a third breed was common to both of these counties, and was known here by the name of the *Old Leicester* sheep, but which have now been almost universally crossed with, or have given place to the *New Leicester* breed, and to others.

On the eastern side of the county, adjoining to Nottinghamshire, and to which it somewhat approaches in soil and climate, it seems probable, that the *Forest* sheep, the fourth sort above alluded to, a good deal prevailed, until the *New Leicester crosses* and others, have in a great measure taken their place.

There are now ten different breeds of sheep, and seven crosses of these and others, viz.:

CHAP. 4. Sheep.

1. Woodland.
2. Old Limestone.
3. Old Leicester.
4. Forest.
5. New Leicester.
6. South-down.
7. Ryeland.
8. Portland.
9. Merino.
10. Spanish.

1. Gritstone.
2. Old Limestone and New Leicester.
3. New Leicester and Northumberland.
4. New Leicester and South-down.
5. Woodland and Merino.
6. South-down and Merino.
7. Ryeland and Merino.

1. *Woodland* or *Moorland* sheep, are rather a small and long-legged sort of horned sheep, whose wool is fine, except on the breech: in general these sheep have white faces, but some have black specks on their noses and legs; it is customary with the flock-masters to cut the tails of their ewes, but to leave those of their rams and wethers at full length.

There are no walls or other fences between the sheep farms of this Woodland district, or even between the different manors or counties, but the whole lies open together; the divisions being in general along the water-head ridges, or lines where the waters divide, to the different cloughs, dales or valleys. The upper parts of which valleys are often very rugged and narrow, and are entirely without habitations or enclosures, which are found lower down in these valleys, and where the farm-houses are also situate; the enclosures skirt round and indent by the valleys, into this high, heathy and barren tract.

Every morning, the sheep of each farmer are found at a certain gate leading out of the enclosed lands around the house, into the open moors, at which gate they are usually foddered in severe weather; and from this place the flock is hunted, by means of the shepherd's dogs, trained for the purpose, to the very extremity of the farm, and something beyond, rather than short of the boundary lines of the next farms; where, being left by the shepherd, they soon begin to graze their way home, to the lea or gate above-mentioned, and this they quickly do if the weather is stormy or bad; which the shepherd or his wife no sooner perceives, than a signal is given to the dog, who runs to the spot and hunts the flock a great way up the Moors, even to the boundary of the farm, often; and thus these poor animals are, in bad weather, and in the winter season, except in snows, almost perpetually in motion during the day.

Shepherds' Societies.

In order to guard against losing their sheep, under this gothic system, two *Shepherds' Societies* are established, one at Hayfield and another at Salter-brook House, who publish the names of all their members, the flock-owners, and *the marks* by which each of their several sheep are distinguished; and at stated periods, meetings are held, for the shepherds to bring in, and mutually exchange their strayed sheep.

The enclosed lands around the farm-houses are principally mown for hay, and the after-grass is preserved for the ewes in the winter and spring, but the wethers and rams are mostly foddered at the leas or Moor gates above-mentioned, or at other walled leas or shelters, at a distance in the

Moors, and where their dung is frequently raked or swept up, for spreading on the enclosed lands. The lambs are usually sent out to be *wintered,* in the lower lands of Derbyshire, Yorkshire and Cheshire, which surround this district; but besides the expense of driving, great loss and inconvenience is experienced, in their being often very badly kept and treated, and taking the *rot,* when thus removed far from their owner's inspection, during the worst half of the year. A further extension of the enclosures on to the sides of the hills, and a greater spirit for improving them (which leases to the tenants, only can induce) and rearing the greatest possible quantities of winter provender, might enable the keeping of the lambs at home, and much better providing for the sheep also, than at present; and the flocks ought to be attended by shepherd-boys, who never leave them during the day.*

The Woodland sheep breeders in this county are numerous, and the flocks range over the moors and mountainous tracts of the High Peak and Scarsdale. The ewes of this breed bring forth their lambs about Old Lady-Day, and, on an average, one in forty produces twins. They are usually shorn during the last week in June, and five fleeces are generally estimated to weigh a stone (14 *lbs.*) The lambs are clipped, and yield from half to three quarters of a pound of wool, which is used by hatters. The long tails of the male sheep are separately sheared: and the wool, which is called birling or belting, is sold for carpet-making. Aged sheep of this breed, when well-fattened, furnish *mutton* for the tables of the luxurious. The late Sir Joseph Banks, bart. was accustomed to send a score of these sheep from Scarsdale moors, to be fattened in his park at Revesby in Lincolnshire; and would jocosely remark to his guests—"Here is Derbyshire bone and Lincolnshire mutton." They are also fed for the Sheffield, Manchester and Derby markets, in the rich valleys of this county; and many noblemen and gentlemen keep a few of them in their parks for the service of their tables. When fattened, they weigh from 16 to 20 *lbs.* per quarter.

There was another breed in the Peak, called the *Old Derbyshire Limestone sheep.* These were large, heavy, bony, polled animals, with thick skins and coarse wool, and were not easily fattened when removed to good land. They are now very rarely met with, nor are *Old Leicester sheep* often seen, at present, in this county, without a mixture of some other breed.

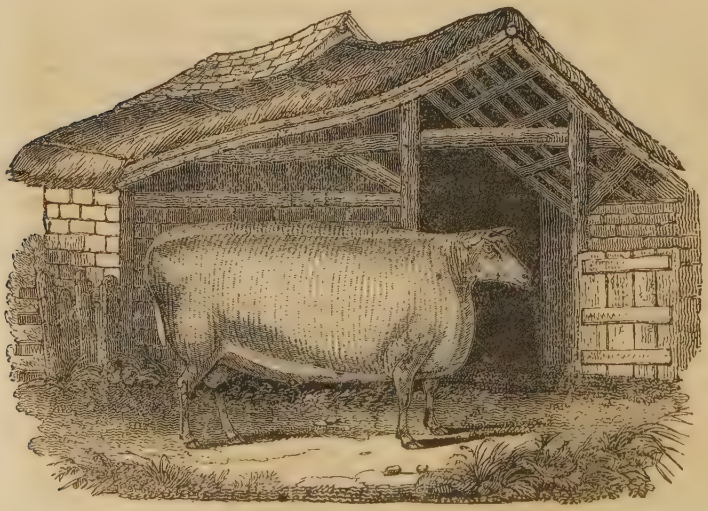
The small breed of sheep from Sherwood forest, which extends from Nottingham to Doncaster, is purchased in considerable lots, and fed by the graziers on the banks of the Trent. They are a small short-legged species, with grey faces and grey legs. Some of them have horns, but they are usually polled. The wool is fine, and they cross well with Merino rams. From thirteen to eighteen of their fleeces weigh a tod (28 *lbs.*) and when fat they seldom exceed 9 or 12 *lbs.* per quarter; although under the management of the late Earl of Chesterfield, some of this breed have produced 5 *lbs.* of wool each, and have been fattened to 18 *lbs.* per quarter. Their wool fetches half as much again in price as the New Leicester wool. The

* This account is taken chiefly from Farey's second Volume, published in 1817; and we are happy to say, that during the last twelve years, much improvement has been made by the sheep-owners; even by those, who, being annual tenants, have no security but their confident reliance on the justice and liberality of their noble landlord.

CHAP. 4. Sheep.

late Mr. Samuel Oldknow had forest ewes of a similar sort at Mellor, which were said to have come from the Lancashire moors beyond Bolton.

The *New Leicester* are generally called the *Bakewell* or *Dishley* breed. They were produced and brought to a state of perfection under the care of Mr. Robert Bakewell of Dishley. This famous stock originated from crosses by choice animals selected from the Old Leicester and the Lincolnshire sheep; the latter of which was the native breed of the fens, before the large-boned and coarse-woolled sheep were introduced to that county. The New Leicesters have been subsequently crossed by the Durham breed, and have been greatly improved by selecting the best ewes from various flocks wherever they could be found. Mr. Smith of Swarkstone-Lows and Foremark, is the present occupier of the farm at Dishley, and devotes great attention to the preservation and improvement of this estimable breed. His great and particular objects have been, to maintain the quality during the growth to early maturity, and to increase the size; as well as to improve the quantity and quality of the wool. Whoever inspects the flocks on Mr. Smith's various farms, will acknowledge, that he has fully accomplished these important purposes. He has, at present, about eight hundred of the New Leicester sheep. He keeps his rams in small paddocks, of excellent construction, with an open shed in the middle of each. During a single season, a ram of his has been let for £200. On May 7, 1829, three ram hogerells, previous to being exhibited at his annual sheep show, were weighed, and were found to be respectively of the following weights, viz.: 224 *lbs.* 240 *lbs.* and 265 *lbs.* Not one of these was lambed before Feb. 6, 1828. Mr. Smith has frequently gained the first prize at the Derbyshire Agricultural shows; and sheep bred under his care have been slaughtered in London, weighing upwards of 60 *lbs.* per quarter The weight of fleece in Mr. Smith's flock, averages from 8 *lbs.* to 13 or 14 *lbs.* The following is a representation of one of Mr. Smith's favourite rams, called *Carcass.*



The *Ryeland* or *Ross* breed of sheep, are small with very fine wool; and as they cross well with the Merinos, they have been kept for that purpose by many persons in Derbyshire.

The *South-Down* sheep have been introduced into this county from the chalk-downs of Sussex. They are a fine and valuable breed, and well merit the attention of the farmer. It is difficult to decide whether this breed, upon the red marl pastures of this county, do not generally excel the New Leicesters. They are certainly more prolific. These sheep have been successfully crossed with the Merino; and by some persons this breed is esteemed to be the best fine-woolled sheep in the county.

The *Portland* sheep were introduced into Derbyshire about seventy years ago, by the late Sir Henry Harpur, bart. The breed was preserved by the late Sir Henry Crewe, bart. in their original purity, who also introduced a flock of South-Downs, from Mr. Ellman of Glynd, near Lewes in Sussex. Sir George Crewe, bart. the present estimable possessor of Calke Abbey, continues to preserve the Portland breed, but has exchanged the South-Downs for New Leicesters: and it is thought that the Portland breed would have become extinct, had they not have been preserved by this distinguished family, who have generally paid the highest attention to the agricultural interests of the county. These sheep are now in the possession of a few other Derbyshire noblemen and gentlemen. They are a small fine-woolled breed; at three or four years old they fatten to about 12 *lbs.* per quarter, and their mutton is considered a great delicacy.

Merino breed. These are a fine-woolled breed of sheep from Spain, and have not been attended to in this country for a much longer period than twenty-five years. These sheep, in their native country, are summered on wild and rugged mountains, whence they are driven to their winter pastures at a considerable distance. Their wool was long considered to be of indispensable importance to our manufacture of fine broad cloth, and large sums were annually sent to Spain for the purchase of Merino wool. No attempt was made to naturalize the growth of this wool in the British islands, until his late Majesty, on the advice, principally, of the celebrated Sir Joseph Banks, undertook their importation and the breeding and rearing of them in England. In this meritorious design, Lord Somerville also embarked, and the efforts of his late Majesty and of that patriotic nobleman were seconded by many enterprising breeders throughout the kingdom. The first spirited gentleman who introduced this important breed of sheep into this county was Wooton Berkenshaw Thomas, esq. of Boythorpe farm, near Chesterfield. The following passage, from the work of Mr. Farey, contains the best account of the public spirited exertions of Mr. Thomas on this occasion, and therefore we cannot do better than extract it without further comment.

"Mr. Wooton Berkenshaw Thomas, of Chesterfield, occupies farms in Boythorp, Brampton and Barlow, on all of which he has Merino sheep; the two latter farms lying adjoining to the high moors, in very exposed situations. The laudable zeal with which Mr. Thomas entered into the design of rearing a Merino flock, has been glanced at already, and cannot soon be forgotten by the agriculturists of this county. Mr. Thomas was at first forcibly struck with the same circumstances, which Lord Somer-

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ville has since mentioned in his 'Facts and Observations relative to sheep and wool, &c.' published in 1809, viz. that 'notwithstanding the great importance of *short-woolled* sheep to the nation, the *whole* attention both of farmers and breeders has, for these thirty years past, been absorbed, in *size and frame*, and carrying to a degree of perfection (hardly credible) the heavy *long-woolled* sheep, such as Lincoln, Cotswold, Romney-Marsh and New Leicester; but more particularly the last; although,' observes his Lordship, 'every practical man will admit, that one-half of the kingdom, at least, is by nature appropriated to the short-woolled breed:'—he might with safety admit much *more than half;* 'for it at length appears, that our climate (from the most northern parts to the most southern) can grow wool, of the finest possible quality.' The mutton of 'the short-woolled sheep, being close in the grain, consequently heavy in the scale and high-flavoured as to taste; the large-woolled sheep more open and loose in the grain' of flesh.

"Mr. Thomas, acting on these persuasions, procured first, I believe, from Mr. Tollet, twenty of his Anglo-Merinos, and omitted no opportunity of increasing his flock from other quarters, particularly by the purchase of rams and ewes at the King's and Lord Somerville's sales: in July, 1810, he was presented with two fine ewes by his late Majesty.

"In order to excite attention to the progress and advantages of breeding Merino sheep, Mr. Thomas has, for some years past, invited a large party of agriculturists of the county to be annually present at his *sheep-shearing*, and to whom he has been anxious to explain fully, every circumstance that could conduce towards forming a practical and safe judgment, on the merits of this breed of sheep: and for this purpose, the live animals in all their states, their wool, their mutton, and cloth, both for ladies and gentlemen's wear, manufactured from the wool grown on his own farms, were exhibited; and it may not be improper to state, that in Mr. Thomas's family, no other habit or broad cloth, but that of his own growth is worn: and which cloths, many competent judges have declared to be equal in quality to the best that can be made from imported Spanish piles.

"Mr. Thomas's account of his flock, in March, 1813, was one hundred and eight pure Escurial, Paular and Nigrette ewes and rams, and three hundred and twenty-one Merino-crossed sheep, of various descriptions. In 1812, Mr. Thomas clipt three hundred and eighty-six fleeces, which sold for £340. 7*s*. (besides £22. 5*s*. 6*d*. for lamb's wool) or nearly 17*s*. 8*d*. for the wool of each sheep, through his whole flock!

"Mr. Thomas finds the pure, as well as all the crossed sheep of this breed (and he has tried most of the usual English crosses) to be perfectly hardy, not only as to *keep*, doing well on the high moors, where, he says, that large Lincolnshire and Leicestershire sheep could not exist, much less be kept in store order, but likewise as to bearing *cold* and *exposure*. On his two farms adjoining the high moors, Mr. Thomas had more than one hundred pure and crossed lambs, dropped in the season of 1813, that all did remarkably well: which hardiness he attributes to the closeness and quantity of their wool; and says, that not a solitary instance has occurred in his crossing, where the wool of the produce of native ewes, by pure Merino rams, has not been *doubled in value per pound*, and also *very considerably increased in weight.*

"In the autumn of 1812, and spring of 1813, Mr. Thomas sold to the same butcher, nearly thirty of his fat Merino and crossed wethers and aged ewes; who reports, that though the *rot* prevailed in a degree which he never before remembered, yet all of Mr. Thomas's sheep died sound; and, as he expresses it, turned out better than they handled while living; that on his shop-board, this *mutton* went off readily at the best price of the day, and that some of his customers gave it a decided preference, for its moderate size, fine grain, and *age*; because, the annual profit from the wool, had enabled the keeping of these sheep round, to advantage, until they were three or four shear."

Sheep.

The *Gritstone* breed is an ancient cross between the Woodland and the Old Limestone sheep. They have black or grey faces, with coarse wool.

Swine.

The principal cross-breeds, most usual in this county, are between the *Old Limestone* and *New Leicester*; between the *New Leicester* and a breed from *Northumberland*; between the *New Leicester* and the *South-Down*; between the *Merino* and the *Woodland*; between the *Merino* and the *South-Down*; between the *Merino* and the *Ryeland*.—Sheep have also been occasionally introduced into this county from Cumberland and from the highlands of Scotland; the latter of which thrive well on the same pastures with our native Woodland breed.

Swine.—These animals were formerly wild in this county, as appears by a grant made in the reign of king John, to which we have already alluded, in the natural history. *Farey* mentions a breed called Derbyshire pigs, which bear a great resemblance to the far-famed hogs of Berkshire; but at present the breeds are very various. At Bretby park there is a fine breed of the Derbyshire pigs: they are black and white, with thin curled hair; their ears are erect, their noses short, their backs are broad and their sides deep. In a store state, kept on whey and vegetables, they appear almost fit for bacon. When slaughtered at fifteen months old, they weigh about 28 score. At Brassington, bacon is cured by Mr. George Toplis on an extensive scale. His pigs are generally of the thick-backed, short-eared sort. He has killed nearly two hundred pigs annually, averaging in weight from 11 to 20 score.—Sir George Crewe, bart. Sir G. Sitwell, bart. Mr. Greaves of Bakewell, and others, possess very valuable breeds. In January, 1828, Mr. Webster of Whitwell slaughtered a pig, which weighed 57 *st.* 4 *lbs.* (14 *lbs.* to the stone.) It had 6 *st.* of fat in it.

Horses.

Horses.—Mr. Farey states, that Derbyshire has long been famous, and has ranked next after Leicestershire, for its stout, bony, clean-legged breed of work-horses, principally of a black colour. Mares of this kind are kept by the farmers generally, and colts are reared annually. The late Mr. R. Bakewell, of Dishley, introduced a cross with the West Friesland horses, which was for many years in great repute among our Derbyshire farmers, and the successor of that enterprising breeder, Mr. Smith of Swarkstone-Lows, has not been inattentive to the improvement of this valuable animal, although he has been chiefly engaged in the cultivation of the other part of his stock. A fine hunter, now in the possession of Sir George Crewe, bart. was bred by Mr. Smith, and is greatly esteemed on account of its proportions. We have been favoured by Sir George with the accompanying plate of this elegant animal.—*Racing* or *blood horses* are bred in this

CHAP. 4. Horses.

county by several persons, and the late Sir Sitwell Sitwell, bart. of Renishaw,* the late Sir Henry Harpur, bart. of Swarkstone, the Duke of Devonshire, and a few others of the nobility and gentry, have at different times kept considerable establishments for training these horses. The race-course at Derby is on a fine flat, more than one mile in circumference, with a handsome stand, and all the requisites for this fashionable amusement. Its central situation might render it one of the most frequented in the kingdom.

Asses.

The *Ass* is an animal much used by the colliers and potters of this county. Little attention, however, has been paid to the improvement of an animal which is very serviceable in many situations. Asses are used in under-ground coal works, for dragging the corves of coal from the banks or faces of work to the bottom of the drawing shaft, and have been found capable of enduring the choak-damp in the pits, better than horses or men.†

Rabbits, Poultry, &c.

Rabbits, poultry, &c.—There are few rabbit-warrens in this county. The Griffe-warren, near Middleton, produces a valuable species much in request at the tables of the luxurious. There are other warrens at Brassington moor, Alderwasley, Rowsley wood, Sudbury park and some other places. On account of the depredations of these animals the breeds are much discouraged.

At Pleasley, on the borders of Nottinghamshire, there is a fine breed of *black-fowls*. Game-fowls are kept at Wingerworth, Buxton and other places.—At Brailsford, Mr. E. S. Cox has a breed of very large reddish brown American *turkeys*, which were brought from that country by his brother, Mr. Roger Cox. This breed is considerably spread among that neighbourhood.—The flocks of *geese* have certainly decreased in this county since the enclosure of the large commons, but cottagers and farmers still keep them in considerable quantities, in the wide lanes, small waste-lands, and on the fields adjoining their farm-steads. Lord Scarsdale has a valuable breed of geese, with black heads and wings.—Ducks, pigeons and other farm-yard fowls are kept here, as in other counties.

Bees are kept in considerable quantities, about Darley in the Dale, Heath, Lullington and many other villages.

Increase of Animals and Vegetables.

Increase of Animals and Vegetables.—We shall add a short memoir on this subject, as a matter of curiosity and some utility; tending to show how soon a new breed of animals, or variety of vegetables, may be introduced and extended, by application and perseverance.

The cattle species, though not very rapid in increase, will be four-fold in 8 years, beginning with 1 bull and 1 cow, ... 2

In 8 years they may be.....	8
16 years, ...	32
24 years, ...	128
32 years, ...	512
40 years, ...	2048

and continue in that proportion, though slaughtered at eight years old.

* The famous racers, from Sir Sitwell Sitwell's stud, were, viz.: mares, Hyale, Goosecap, Goosander, &c. Horses; Clinker, Moorcock, Clasher, Pepeline, &c.

† At Riddings and other collieries, where asses are used under ground, I have been much amused, at seeing these animals drawn up on the Saturday evening, in order to graze on the surface until Monday morning: which they seem, from habit, to expect; and when let loose, testify their joy, by the most frantic braying, running and kicking up. The contrast is striking, on seeing them driven to the pit-head, and having the sling-chains wrapped round them, and expecting to be caught up, and suspended high in the air, before they are let down the shaft to their labour. *Farey*, Vol. III. page 162.

Increase of Animals and Vegetables.

Sheep.—Suppose the ewes each rear annually one lamb only, over and above losses, the young ewes to bring forth at two years old, half males, and the old stock cut off at five years old, all the others preserved,—

One ram and one ewe at first,		2
In one year may be 1 ram and	2 ewes,	3
Two years, 2 rams and	3 ewes,	5
Three years, 3 rams and	5 ewes,	8
Four years, 6 rams and	7 ewes,	13
Five years, 10 rams and	10 ewes,	20
Suppose the original pair now cut off, deduct		2
The increase is nine-fold in five years.	Remains,	18

If 2 sheep in 5 years increase to	18
10 years, they may be	162
15 years,	1,458
20 years,	13,122
25 years,	118,098
30 years,	1,062,882
35 years,	9,565,938
40 years,	86,093,442

And so in proportion.

Swine.—This species may increase five-fold annually, at a very reasonable calculation: suppose ten at one or two litters brought forth by each dam annually, half males, half females, and the old stock annually cut off,—

Thus two, a boar and sow, may in 1 year be	10
2 years,	50
3 years,	250
4 years,	1,250
5 years,	6,250
6 years,	31,250
7 years,	156,250
8 years,	781,250
9 years,	3,906,250
10 years,	19,531,250

Rabbits are still more prolific, and would, if permitted, soon increase in numbers sufficient to overrun the earth. It seems to be in the system of nature, that a large proportion of animals should be prematurely cut off as food for others; otherwise, their tendency to increase would so exceed their means of subsistence, as to occasion a general scarcity of food.

Vegetable increase is still more rapid than that of animals. It is providentially ordered, that animals as the food of man, should have a tendency to increase faster than man himself; and vegetables as food for both, have a tendency to increase faster than either, insomuch as in a very short time to cover the whole surface of the earth by their natural power of accumulation.

We shall conclude these theoretic calculations by the often-repeated example of the increase of a grain of wheat in a ten-fold proportion:

One grain of wheat may be, in 1 year,	10 grains.
2 years,	100
3 years,	1,000
4 years,	10,000
Which, suppose 1 pint in 5 years,	10 pints.
6 years,	100
7 years,	1,000

CHAP. 4.

Increase of Vegetables.

Or 125 gallons, or 15 five-eighths bushels, which is enough to sow	...	8 acres.
In 8 years would sow	.....	80
9 years,	.....	800
10 years,	.....	8,000
11 years,	.....	80,000
12 years,	.....	800,000
13 years,	.....	8,000,000
14 years,	.....	80,000,000
15 years,	.....	800,000,000
16 years,	.....	8,000,000,000
17 years,	.....	80,000,000,000
18 years,	.....	800,000,000,000

which is more than six times the superficies of the whole earth and sea.

Farm Buildings.

The farm buildings in Derbyshire are similar, in general, to those of other counties: but there are some of peculiar excellence, that demand our particular notice. At Bretby, the Earl of Chesterfield has in his park one of the most complete farming establishments in this part of England. The condescension of his lordship, and the kindness of Mr. William Martin, his lordship's architect and builder, have enabled us to lay before our readers a more correct plan and elevation of these buildings than have previously been presented to the public.

Reference to the Plan of the Farming Establishment of the Earl of Chesterfield.

Figure or letter of reference.	BAILIFF'S HOUSE AND POULTRY COURTS.
A	Lord Chesterfield's or dairy parlour.
B	Bailiff's sitting room.
C	Bailiff's kitchen.
D	Cream dairy, fitted up with marble.
E	Entrance passage.
F	Staircase.
G	Store room.
H	Pantry.
I	Cheese dairy.
K	Dairy scullery.
L	Salting house and pig cistern.
M	Dairy court with covered way.
N	Pump yard.
O	Bakehouse.
P	Water closet.
Q	Roosting houses.
R	Laying and sitting houses for poultry.
S S	Feeding houses.
T	Poulterer's shop.
U	Aviary for pheasants and birds.
V	Duck and goose houses.
W	Water cistern.
i i i	Passages.

FARM YARD.

1 1 1	Pig sties.
2	Shed for store pigs.
3	Dressing floor, corn bins, &c.
4	Winnowing chamber, with granary above.
5	Barn.
6	Tool house.
7	Corn hole for undressed corn.
8	Labourers' tool houses.
9	Porch to barn, with pigeon house and clock above.
10	Thrashing machine.
11	Horse race to ditto.
12	Straw house.
13	Stairs to cheese room.
14	Wagon shed, with cheese room above.
15	Bull stalls.
16	Cart house.
17	Loose stall.
18	Implement house.
19	Hay bin.
20	Cow shed for ten cows.
21, 22 & 23	Cottage for a farm labourer.
24	Stable for eleven wagon horses, with hay loft over it.
25	Gateway, with granary above.
26	Stable for two horses.
27	Calf house, fitted up with stalls and racks.
28	Stairs to hay and straw chambers over the last-mentioned places, Nos. 27, 26 and 25.
29	Cow shed for twenty cows.
30	Steaming house. a. Steam boiler. b. Flue. c. c. c. Boilers for linseed, &c. d. d. Steam cisterns. e. Couch for steamed fodder. f. Stairs to the room above, containing a cutting machine and a bruising machine. g. Tumbling shaft. h. Cistern containing the machinery.
31	Covered shed for horse race to ditto
32	Hay barn to cow shed.
33	Entrance.
34	Hack stable.
35	Main drain.
36	Paved passage.
K. K. K.	Paved causeways.

WILLIAM MARTIN,

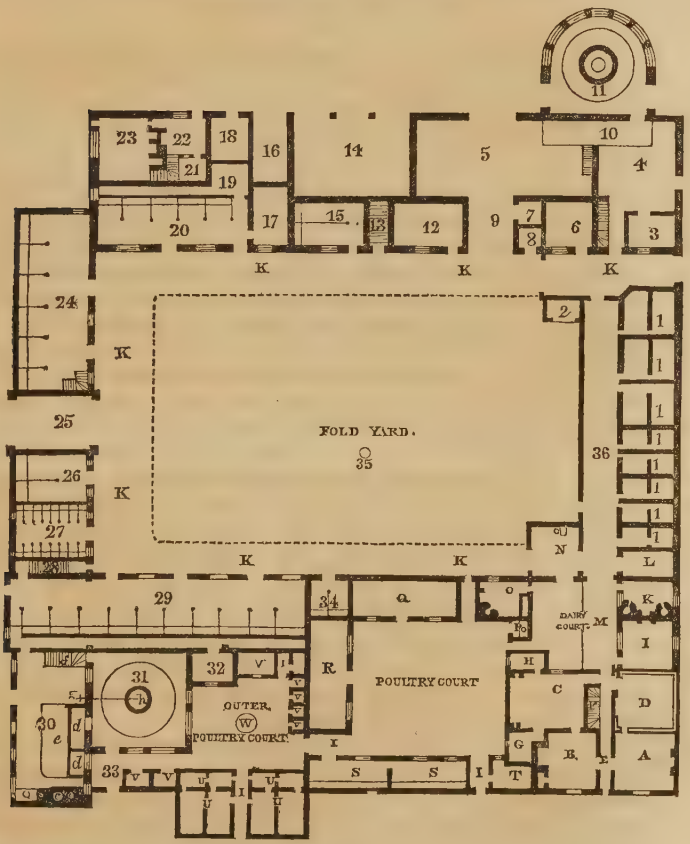
Architect and Builder.

Scale of the Farm Buildings, in feet.

NORTH ELEVATION OF THE FARM BUILDINGS.

SOUTH ELEVATION OF THE FARM BUILDINGS.

EAST FRONT.



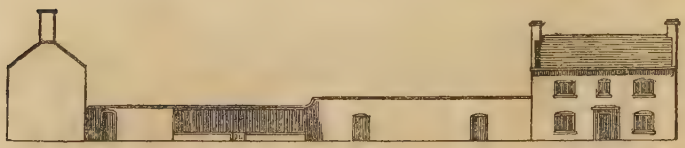
WEST FRONT.

GROUND PLAN. SOUTH FRONT.

CHAP. 4.

Farm Buildings.

WEST ELEVATION OF THE FARM BUILDINGS.



SOUTH ELEVATION OF AVIARY, POULTRY HOUSES, AND BAILIFF'S HOUSE.

The farm buildings of Abraham Hoskins, esq. at Newton Solney, are both extensive and complete.—The farm-premises at Locko park, Chaddesden park, Calk park, &c. are built in a very commodious and elegant manner.—The Moscow farm buildings, near Duffield, in the estate of Messrs. Strutt, are fire proof, being built with brick arches. They contain a milk-house in the centre. There are two wings, each of which contains stalls or standings for twenty-five cows and a bull, a calf house and open sheds for barren cows. Every requisite for such an establishment is complete. The cow-sheds are so contrived that space is left for a person to walk round each beast to fodder and milk it; and the conveniences for feeding and watering the cattle are highly commendable, as well as the facility with which the stalls are ventilated. These buildings were erected by the late Henry Strutt, esq. about the time of the destruction of Moscow, from which circumstance they derive their name. The farm contains about one hundred and seventy acres of land, equal to any in the county: and has recently been let, on a lease of fourteen years, to Mr. Henry Turner, at about £500. per annum; who, at the same time, contracted to furnish the manufactories of Messrs. Strutt at Belper and Millford with eighty gallons of milk daily, at 8*d*. per gallon. The stock of Mr. Turner consists at present of twenty-seven prime, short-horned dairy cows, and he is increasing the number. He rents also of John Balguy, esq. of Duffield, seventy acres of similar land, and may boast of holding more than two hundred and forty acres, that require as little trouble and expense in the cultivation as any similar number of acres in the kingdom. Mr. Turner, who is an experienced grazier, gives a decided preference to the Woodland sheep, and to the Kyloe or mountain cattle.

Gardens, Orchards, &c.

The gardens, orchards and other plantations for fruits and vegetables, are numerous in the southern districts of this county. Those belonging to the gentry and nobility are as productive of early culinary plants as the garden-grounds of other more southern districts. The principal gardens are those attached to the seats of the Duke of Devonshire, the Earl of Ches-

terfield, Lord Melbourne, Lord Scarsdale, &c. &c. Those of Lord Melbourne, are a curious and elegant relique of the old style of horticulture, which was brought from Holland with William III.; consisting of groves, long walks, statues and fountains. The Chatsworth gardens cover nearly forty acres, and are in the highest condition of picturesque cultivation. Richard Arkwright, esq. has repeatedly obtained the society's prize for the grapes produced in his beautiful gardens at Willersley, which are open for the inspection and recreation of the public, on three days every week.—The taste of the early part of the last century prevailed formerly as much in Derbyshire as in any other part of England; and yew trees, clipped into every imaginable fantastic shape, are still to be seen at Kilburne and Ideridge-Hay; but these things remain rather as curiosities than as examples to other horticulturists. The hot-house on the grounds of William Strutt, esq. of St. Helens, Derby, is esteemed one of the most curious and complete buildings of this description in England. The flues for the admission of hot and cold air, and those for distributing steam as a moist vapour for the nutriment of the plants, are admirably arranged.*

Farm houses are generally well supplied with gardens for vegetables, which are well cultivated. The cottagers are seldom without a rood of ground for common vegetables and potatoes; and in the neighbourhood of Derby and other large towns, tradesmen and other persons occupy considerable tracts of garden ground, in which they seek healthful amusement. The gooseberry, tulip, ranunculus and other shows of flowers and fruit are much attended to by amateurs among both the gentry and operatives (particularly the framework-knitters) in Derby and its neighbourhood.

Market gardens are cultivated near Derby. Messrs. Wilson have excellent garden grounds and nurseries. That of Mr. Palmer, near Darley Abbey, produces early vegetables and fruits. At Ashbourn, Chesterfield, Duffield and Melbourn, there are also extensive gardens and plantations. The vegetables and fruits grown at Melbourn are generally earlier than in any other part of the county.—Mr. Gratian's market-garden, at Belper, is highly productive.

It has been observed, that the orchards of this county are not numerous, although there are spots in the red marl districts favourable for the growth of apple-trees, and which might, with proper attention, produce fruit equal to that of Worcestershire or Herefordshire. On the limestone, all fruit trees degenerate after a few years' growth. Walnut trees thrive near Bakewell, and there are very large trees of this species at King's Newton and at Newton Solney.—At Bretby park there is a large grove of the black-berried elder, the berries of which are preserved as food for pheasants.—At Overton in Ashover, there is an open grove of more than one hundred birch trees, which for upwards of half a century have been appropriated to the making of birch wine, from their juice or sap. They are each tapped

* We cannot omit here to mention the obligations of the curious in horticulture and the productions of the hot-house, to the ingenious Mr. Samuel Bregazzi, of Derby. His *bark-bed thermometer* is spoken of by experienced men as one of the best instruments of the kind ever invented. His *hot-house thermometer* possesses this advantage, that when hung from the roof of the hot-house, the heat of the sun is prevented from operating upon the bulb by the current of air which passes between the backs of the instrument. The first of these instruments enables the cultivator to ascertain the temperature at the roots or in any part of his pine-bed.

CHAP. 4. Park, Wood and Forest Timber.

about once in three years. The trees are tall, with small heads, and do not appear to be much injured in their health or timber.

Copse woods and timber.—The copse woods of this county appear, generally, to be very ancient; and few, if any, have been planted within the last century. Large trees are, nevertheless, rare in these old copses, but they are abundant in *underwood*, which when neglected is destructive to the larger timber. The neglect of these old copses is justly attributed to the burning of coal as fuel.—The later plantations, however, are much more carefully attended to. They are well fenced in with stone walls or good hedges. The principal proprietors and planters of these woods, which are now seen extending across the barren wastes and moorlands of the county, are the Duke of Devonshire, the Duke of Portland, the Duke of Norfolk, the Earl of Chesterfield, the late Sir T. W. Hunloke, bart. Sir George Sitwell, Francis Hurt, esq. Richard Arkwright, esq. &c.

Of forest trees, growing in parks and other situations, we may mention the grove of oaks in Kedleston park, which are remarkable for their bulk and their beauty. In Calke park and in Hardwick park there are fine oak and other forest trees. At Shining-Cliff, near Crich, there was felled an oak, containing nine hundred and sixty-five feet of timber, and measuring thirteen feet four inches across the stool.—At Bretby there is a remarkable cedar tree, and several very large Birch trees. The fir trees in Melbourn gardens are particularly worthy of notice, as many of the boles are eighty feet in height, and from eleven to thirteen in circumference. In the grounds of the Earl of Harrington, at Elvaston near Derby, there are fine cedar trees, and thriving plantations of young oaks.

Chamomile.

Chamomile, an uncommon species of culture, as a field-crop, is practised in this county. The culture of this plant is as follows: "a loamy soil is chosen, and, after the ground is well prepared by thorough cleanings, about the latter end of March the roots of an old plantation are taken up, and divided into small slips, which are planted in rows about eighteen inches asunder, and about the same distance in the rows. The plants are kept clean by frequent hoeing and weeding with the hand. In September the flowers are fit to gather: their perfection depends upon their being fully blown, without having stood so long as to lose their whiteness; the flowering continues until stopped by the frosts. The gatherings are repeated as often as successions of flowers appear; but this depends very much on the season, dry open weather furnishing more successions than wet or dull weather. When the flowers are gathered, they are carefully dried, either in kilns very moderately heated, or on the floors of boarded rooms, heated by slow fires: the object is to keep the flowers white and whole, and this is best effected by drying them as slowly as possible. The produce varies from two hundred weight, or even less, to four, five, and, in some few instances, six hundred weight per acre. The price has also varied from 40*s.* to £7. per *cwt.* The plants usually stand three years, of which the first affords the smallest produce; and the second, the greatest and best. When the same plants are continued beyond three years, the ground becomes foul, and the flowers weak. When dried, the flowers are packed in bags; and afterwards sold to persons in the neighbourhood, who transmit them to the druggists in London."

CHAP. 4.

Agricultural Societies.

Agricultural Societies.—In 1819, several respectable agriculturists, in conjunction with some of the nobility and gentry of the county, formed a kind of institution for the encouragement of agricultural improvements. This institution assumed the denomination of the Scarsdale and High Peak Agricultural Society; but has subsequently been termed the Derbyshire Agricultural Society. Its leading objects are the promoting, by prizes, on appointed annual show-days, the most useful breeds of cattle, sheep, pigs and horses. The Society also holds out considerable encouragement for the good conduct of male and female farming servants. The annual meetings of this Society are held alternately at Chesterfield and Bakewell; and, originally, the period of these annual meetings was the first week in July. On some late occasions, it has been held on the 29th of September. Sir William Chambers Bagshaw is the president; William Carleill, esq. vice president; and Mr. Paul Bright is the secretary and treasurer. In mentioning this Society, it is due to Mr. Thomas* of Chesterfield to say, that he was not only the founder of it, but that he has, ever since its establishment, been one of its warmest friends and supporters. The general beneficial consequences of these meetings, and of the conduct pursued by the members of this Society, are now acknowledged throughout the county, and particularly by those who are able to compare the present farming stock of Derbyshire with their recollections of what it was ten years ago.—There is also an Agricultural Society at Repton, which has been established about twenty-five years.

The following list of Enclosures exhibits a compendious history of that species of agricultural improvement in this county, according to the dates of the several statutes.†

Enclosures.

	a.	*r.*	*p.*
Alfreton, Act passed, 52 Geo. III.; award executed in 1816	263	3	28
Aldwark in Brassington, 1807			
Alvaston and Boulton, in one Act, 1802			
Appleby, part of (the remainder in Leicestershire) 56 years ago			
Ashford and Sheldon, in the parish of Bakewell, in one Act, 1765			
Ashford in Bakewell, 1807			
Ashover, 1780; award executed in 1783 (Act says 3000 acres) ...	3684	0	0
Aston in the parish of Hope, 1806			
Aston-upon-Trent, award executed in 1763	1500	0	0
Bakewell and Over-Haddon, in the parish of Bakewell, in one Act, 1806; award executed in 1810	2674	0	0
Bamford in Hathersage			
Barlborough, 1789, open fields 250 acres, commons and waste grounds 650 acres: award executed in 1798	600	0	0
Baslow, 1823			
Beeley in Bakewell, 1813–14. Commons 2277 *a.* 3 *r.*; old enclosures 924 *a.* 3 *r.* 15 *p.*	2277	3	0
Beighton, award executed in 1799	600	0	0
Belper ward, (Heage) belonging to Highedge, award executed in 1771	598	2	15
Birchover in Yolgrave, 1809			
Bolsover and Clown, in Bolsover, 1780	1592	0	0
‡Bonsall, Wirksworth and Matlock, award executed in 1776	733	0	34
Bonsall leys and green (open field) Act passed, 13 Geo. III.; award executed in 1774	490	0	14
Boulton, in St. Michael	98	0	0
Bradburne, 43 Geo. III.			
Bradwell in Hope, 1806; award executed in 1819	718	0	17
Brampton, Act passed in 1815; commons 3274 *a.*; open fields 74 *a.* 2 *r.*; old enclosures 4571 *a.* 2 *r.*	3348	2	0
Brand in Hartington			
Brassington, 1803			
Breadsall, Act passed, 55 Geo. III.; award executed in 1817; open meadows, commons and waste grounds	1461	0	0
Breaston, 1757	300	0	0
Burnaston, 1789			
Buxton, in the parish of Bakewell, Act passed, 12 Geo. III.; award executed in 1774	977	3	25
Callow in Wirksworth, 1805			
Chaddesden, Act passed, 31 Geo. III.	900	0	0
Chellaston, Act passed, 42 Geo.			

* In May, 1821, the Board of Agriculture awarded to W. B. Thomas, esq. a silver cup, of the value of thirty guineas, for the best cultivated farm within the Hundred of Scarsdale and High Peak.

† The first enclosure, by Act of Parliament in the County was Scarcliffe, in 1729; next in succession followed Winster, Litton, Ashford, &c.

‡ The publisher has reason to believe that there were separate Acts for these enclosures.

CHAP. 4.

Enclosures.

	a.	r.	p.
III.; award executed July 5, 1804	700	0	0
Chelmorton and Flagg, in Bakewell, in one Act, 1805; award executed in 1809	1771	0	29
Chilcote, part of (the remainder in Staffordshire)			
Church Broughton, old land 749 *a.* 3 *r.* 16 *p.*	388	1	33
Codnor in Heanor			
Crich in South Winfield, 1786; award executed in 1788	450	0	0
Dale Abbey			
Darley in the Dale, 1766	4000	0	0
Derby Hills, in the county of Derby, parcel of the manor of Castle Donnington; award executed in 1771	255	1	12
Dore in Dronfield, 1810, Act passed, 49 Geo. III.; award executed in 1822	5000	0	0
Doveridge, 1791			
Duckmanton (Long)			
Draycott, in the parish of Wilne; award executed in 1764	1119	3	1
Duffield, 1786			
Eckington, commons and waste lands 1070 acres, common fields and mesne enclosures 200 acres; award executed in 1804	980	0	0
Egginton			
Elton in Yolgrave, 1809, about	400	0	0
Elvaston and Thulston; award executed in 1762	884	1	16
Etwall, 1797	854	0	0
Eyam, 1803, 43 Geo. III. old enclosure 2180 *a.* 1 *r.* 25 *p.*; award executed in 1812	2185	1	38
Fairfield in Hope, 1771	800	0	0
Ferneylee in Hope			
Findern in Mickleover			
Flagg in Bakewell, 1805; see Chelmorton			
Foolow in Eyam			
Great Hucklow in Hope			
Great Longstone, Little Longstone and Wardlow, in the parishes of Bakewell and Hope, all enclosed under one Act and by one award; Act passed in 1810; award executed in 1824	1500	0	0
Hare Hill in Boylstone			
Hartington, 1798			
Hartshorn, 1766	917	2	26
Hasland in Chesterfield; award executed in 1780	542	2	36
Hathersage, 1810			
Hatton in Marston on Dove			
Hayfield in Glossop			
Hazzlewood, 1786			
Heage in Duffield, 1769			
Heanor	500	0	0
Heath and Stainsby, in the parish of Ault Hucknall, in one Act, passed in 1826 and 1827; commons 390 *a.*; old enclosures 3663 *a.* 3 *r.*	390	0	0
Hilton in Marston on Dove			
Hognaston Wynn and Hognaston Oldfield, 1774	516	0	12
Holbrook in Duffield			
Hollington, in the parishes of Longford and Brailsford, Act passed, 57 Geo. III.; award executed in 1820; old enclosure 600 acres	280	0	0
Holloway in Crich, 1771			
Hope, Bradwell, Aston and Thornhill, all in one Act, which passed, 46 Geo. III.; but the award only states, Bradwell common to contain 718 *a.* 0 *r.* 17 *p.* and not any of the other places are stated, 1806; award executed in 1819	718	0	17
Horsley			
Hulland Ward, 1773. This belonged to and was divided amongst the several parishes or townships of Mugginton, Mercaston, Windley, Hulland, Biggin, Turnditch, Ideridgehay and Ireton wood			
Ible in Wirksworth			
Ilkeston, 1794	739	2	8
Killamarsh, award executed in 1779	327	2	17
Kirk Ireton, 1805			
Langwith and Pleasley, parishes of, and the hamlets of Stony-Houghton and Shirebrook; award executed in 1748	1000	0	0
Lea in Ashover, Crich and South Winfield, 1777; award executed in 1779	1022	0	14
Little Hallam in Ilkeston, 1796			
Little Hucklow in Hope, Act passed 43 Geo. III.; award executed in 1814	341	0	24
Little Wilne, 1763			
Littleover in Mickleover, 1768			
Litton in Tideswell, award executed in 1764	1127	1	3
Locko in Spondon			
Long Eaton, in the parish of Sawley, 1787	1600	0	0
Mackworth, 1763	2490	0	8
Marston Montgomery, profits in aid of poor rates, 1784	89	0	0
Matlock, 1780; award executed in 1784 (Act says 1500 acres)	1719	0	0
Makeney, 1786			
Melbourn, 1787			
Mickleover			
Milton, waste lands enclosed about the same time as Ticknall			
Monyash in Bakewell, 1771; award executed in 1776	1375	3	28
Morley	509	0	0
Morton			
Norbury, 1818			
North Winfield	558	0	0
Norton, in the parishes of Norton and Dronfield, Act passed 45 Geo. III.; award executed in 1815	112	0	0
Oakerthorpe in South Winfield			
Ockbrook, 1772	700	0	0
Osmaston in Brailsford			
Packington, part of (the remainder in Leicestershire)			
Palterton in Scarcliffe, see Scarcliffe			
Parwich, award executed in 1789	927	3	15
Pentrich			
Ravenston or Raunston, Act passed in 1760	250	0	0
Repton, 1766; award executed in 1769	656		0
Rowsley, Little, in the parish of Darley, Act passed, 55 Geo. III.; award executed in 1817; exclusive of roads	217	3	24
Scarcliffe and Palterton, 1729; common field land 550 acres; wastes and commons 420 acres	970	0	0
Sheldon in Bakewell			
Shirland, 1777; award executed in 1780	231	3	7
Sinfin Moor, Act passed, 42 Geo. III.; award executed, July 3, 1804; an Act passed, 7 and 8. Geo. IV. for draining Sinfin Moor, 797 *a.* 1 *r.* 37 *p.*; and other lands, called Osmaston Moor meadow and Normanton Moor meadow, 96 *a.* 2 *r.* 26 *p.*	894	0	23
Smalley in Morley			
Smisby, Act passed, 1 Geo. IV.; award executed Nov. 20, 1826; open fields and waste lands	550	0	0
Snelston, Act passed, 5 Geo. IV.; award executed May 3, 1828; open fields and common land	160	0	0

	a.	r.	p.
South Normanton, 1768	250	0	0
South Winfield, 1786	251	0	0
Spondon, 1788	471	0	0
Stainsby and Heath Manor, in the parishes of Ault Hucknall and Heath, in one Act, see Heath			
Stanley in Spondon	82	0	0
Stanton-by-Dale	103	0	0
Stanley, 1792			
Stanton-in-the-Peak, in Yolgrave, 1809, Act passed, 49 Geo. III.; award executed in 1819; exclusive of roads	850	3	26
Stapenhill	100	0	0
Staveley, award executed in 1782	491	1	11
Stoney Middleton, award executed in 1783	500	0	0
Stretton in North Winfield and Morton	503	0	0
Sutton in Scarsdale			
Swarkstone			
Taddington and Priestcliff in Bakewell, 1793; award executed in 1794	1600	0	0
Temple Normanton in Chesterfield, which the only two freeholders in the township divided betwixt them	80	0	0
Thornhill in Hope, 1806			
Tibshelf	330	0	0
Ticknall, commons and waste lands, enclosed November, 1765			
Walton in Chesterfield			
Wensley, in the parish of Darley in the Dale: the common called Oaker Hill, containing, we believe, about 120 acres, was divided into convenient enclosures and let to different tenants, and the rents applied to the relief of the poor	120	0	0
West Broughton, in the parish of Doveridge, award executed in 1731	189	2	26
West Hallam			
Weston Underwood in Mugginton, 1786			
Wheston and Tideswell, in one Act, which passed, 47 Geo. III.; award executed in 1821; commons 2713 *a.*; mesne lands 227 *a.* 3 *r.*; old enclosures 1481 *a.* 1 *r.* ...	2940	3	0
Whitfield, in the parish of Glossop, 1810; award executed in 1813 ...	1951	3	15
Whitle, in the parish of Glossop, old and new enclosures	1916	0	0
Whittington, Act passed in 1821; award executed in 1825; old enclosed land 927 *a.* 1 *r.* 26 *p.*; common fields, undivided lands and commons 612 *a.* 1 *r.* 39 *p.* ...	612	1	39
Whitwell, Act passed, 53 Geo. III.; award executed in 1823; commons	950	0	0
Willington, award executed in 1768	1300	0	0
Windley in Duffield			
Windmill Houses in Hope			
Wingerworth, in the hamlet of Tupton, in the parish of North Winfield, award executed in 1758	400	0	0
Winster in Yolgreave, award executed in 1764	404	3	37
Winster bank pasture, Act passed 1809, about 100 *a.*	100	0	0
Wirksworth, enclosed 1802; award executed in 1806; old enclosures 2225 *a.* 1 *r.* 24 *p.* In this Act a provision was made for the better supply of water to the town of Wirksworth	764	0	6
Wormhill in Tideswell, Act passed, 43 Geo. III.; award executed in 1822	1116	0	14
Yolgrave and Middleton, in one Act, 1814, exclusive of roads; Act passed, 55 Geo. III.; award executed in 1818; commons and waste grounds 269 *a.* 2 *r.* 4 *p.*; open fields, mesne or intermixed lands 32 *a.* 1 *r.* 20 *p.*; Middleton common and waste grounds 612 *a.* 1 *r.* 25 *p.*; common pasture, called Kenslow 312 *a.* 3 *r.* 29 *p.*	1227	0	33

The small wood engraving, here introduced, will show an easy method of securing corn and hay-ricks in wet seasons; the plan has been adopted by many farmers, and is universally approved by those who have purchased these rick covers. Much valuable hay was injured in the summer of 1828 for want of them, and many farmers afterwards regretted they were not provided with such security.

CHAPTER V.

Manufactures: trades and occupations: commerce with other counties and with London: general exports: conveyance of goods and passengers. Wagons, vans, stage coaches: roads, canals, rail-ways.

Antiquity of Derbyshire Manufactories.

THE manufactories of Derbyshire are numerous and various. We have already observed, that this county, notwithstanding its central situation, its abundance of coal-mines and its inexhaustible stores of minerals, seems to have been slow in entering into the competition of artificial production with the neighbouring districts. It has, indeed, been frequently noticed that the inhabitants of places where the raw materials of manufacture are abundant, seldom engage themselves in any species of manufacture beyond that which may be requisite to give the raw material a marketable value.

Lead Ore.

The dressing and smelting of ore were probably the first arts known and practised in Derbyshire; and these were certainly in use long before the Roman invasion. The Phœnicians, and after them the travelling merchants of Gaul, frequented this island for the sake of its metals; and they did not confine their commerce to the remote peninsular projection of Cornwall, we may be assured, but carried their intercourse into the very heart of the country, and obtained from Derbyshire, lead and probably other minerals. The word *Tor*, is a common name for a mountain in the north of this county, and it is a word of Phœnician derivation; and the meaning of many of the terms still in use among the miners, can only be traced to an Asiatic source, which seems to go far in proving, that the mineral treasures of the country were, at a very early period, wrought either by a colony of foreigners from the east, or under their direction. The miners anciently possessed extraordinary power and privileges, probably derived from these settlers from the east. They claimed a right of cutting wood and timber for the purposes of mining and smelting the ore, not only from the wastes and forests within the mining district, but from any of the neighbouring woods. The miners of what is called the King's Field have asserted this privilege within the last fifty years, and timber has been seized and carried away from Needwood forest, in Staffordshire, for the use of the mines in Matlock; but these practices are now extinct. In early periods, the ore was smelted at the tops or western brows of the *Tors* or high hills, by fires made of wood, and blown by the wind only; piles of stones were set loosely round them, and perhaps arches were formed underneath them, to favour and increase the action of the wind upon the fire. These ancient hearths were called *boles*, manifestly from an eastern word signifying a *lump of metal*,* and from these *boles* many of the highest hills in and near the lead-districts derived their names.† The sites of these ancient *boles* are easily found from the sterility of the spots, and by the

* From the same root is formed the Greek βωλος, a lump of earth, metal or stone.

† The Bole-Hills, at Bakewell, Hathersage, Wingerworth, Wirksworth, &c.

Lead.

want of almost all herbage, except that diminutive plant the *campanula rotundifolia*, which is peculiar to spots where lead either naturally abounds or is thrown up into mine hillocks. These very ancient boles or wind-hearths were succeeded by *slag-mills*, which resembled a blacksmith's forge on a large scale, blown by bellows of a great size, which were worked by men or by water. Some of these slag-mills may be still seen, in Bonsal Dale, Baslow, Ashover and various other places.—The restrictions of the old mining regulations prevented improvements. The Crown claimed the right of smelting all the lead ore found in the King's Field, and took toll or duty for it; and so burthensome were these exactions, that the mines were neglected, until a composition was made and the Crown agreed to accept sixpence duty on every load of nine dishes of ore, and to permit smelting to be practised in private furnaces. This sum continues to be paid to the bar-master at the time of measuring the ore. Similar restrictions continued in force on the manors of the Duke of Rutland, and an old slag-mill or hearth remained at Great Rowsley long after such furnaces had been disused elsewhere. In speaking of the lead mines and their produce, we have already mentioned the introduction of cupolas or low arched reverberatory furnaces.*—The ore, when dressed for sale in the Low Peak Hundred, is measured by the *dish* of fourteen pints, or by the *load*, which consists of nine *dishes*. The *pint* contains forty-eight cubic inches. In the High Peak, sixteen pints are reckoned to the dish. When the lead is weighed, which is frequently the case when purchased by the smelter, a *dish* is estimated at 58 *lbs.* and the long hundred weight of 120 *lbs.* is used.† At the beginning of the sixteenth century, it was not uncommon for the possessors of mines to contract with government or with general dealers for the produce. The fourth Earl Talbot had great interest in the mines of Derbyshire, and the following extract from the Talbot Papers, Vol. I. fol. 19, will show the price of lead in the year 1517. Allen, an agent of the Earl, in a letter to his lordship, says, "I have made a bargain wt Sir John Cut, master of the Ordnance in the Tower, for XXX fodrs of Lead,‡ to be delyv' at London betwix this and Bartholometide at iiii *lb* ii *s* viii *d* the fodr' yf yor Lordship be so content, or ellis hit is no bargain."—The present price of lead is about £18. per ton.

Lead Manufactories.

A list of the lead mines will be found in the Chapter upon the Subterranean Geography of the County, and it will suffice to remark in this place, that there are about two thousand two hundred and eighty miners employed in getting ore. The Messrs. Alsop of Lea Wood, are the greatest smelters in Derbyshire: their cupolas produce on an average about thirty tons per week. Messrs. Milnes of Ashover, Richard Hurt, esq. of Wirksworth, John Barker, esq. of Hilltop near Bakewell, Jer. Royse and Co. of Castleton, and Mr. Furnace of Stoney Middleton, are also very considerable smelters. —The lead mills, for the manufacture of white and red lead, of Messrs. Walker and Co. of Messrs. Cox, Poyser and Co. and of Mr. Charles Holbrook, situated at Derby and its immediate neighbourhood, are extensive. —Leaden pipes are manufactured by Messrs. Cox and Co. of any given

* See Chap. II. page 80. † See page 81.
‡ A fodder was about 2000 *lbs.* in London.

CHAP. 5. Lead.

bore or length, at their works in the Morledge, Derby, where these gentlemen have a shot tower, which is an interesting object. This is a circular building, fifty yards in height. The formation of the shot is an ingenious process. This shot is called *patent shot*, to distinguish it from the common sort. The ore, in a state of fusion, is poured from a boiler at the top of the tower, and falls through sieves of different meshes into a reservoir of water below. This tower suffered considerably by fire, about four years ago, but was shortly after repaired.

Cauk.

An excellent imitation of white lead, applicable to most of the purposes for which that article is used, was introduced by that skilful and unfortunate chemist, Mr. Duesbury, about thirty years ago. It is obtained from a precipitate of cauk or barytes, and is now manufactured at Via Gellia in Bonsal Dale and at Derby by Messrs. Goodale, and also at Derby by Mr. R. Frost, and by Mr. Hadley. Cauk is found in lead mines throughout the county, and the price of it at the pits, in its raw state, is from 8*s*. to 12*s*. per ton.

Ironstone.

At very early periods the *ironstone* of this county was known, and in various places coal-furnaces were erected for smelting it. The first mode of getting this mineral was by open casts or works, but when the *bassets* or exposed beds of ore were exhausted, recourse was had to excavations, which are frequently made in the form of a *cone* or *bell*, from three to ten feet deep, and spreading in its descent over many yards. When the ironstone bed is covered by a solid stratum, the ore is worked in the regular way of mining. The ironstone beds at Codnor Park near Heanor, those at Morley Park near Heage, and those at Somercotes in Alfreton, Chesterfield and Staveley, are the most valuable in the county. The old coal furnaces continued in use until within the last fifty years, but iron is now made in tall furnaces only, heated with the coke of pit-coal, and blown by cylinder bellows worked by steam-engines. When the fusion of the ironstone commences, the smelted metal passes through layers of coke and limestone, and collecting at the bottom of the furnace, is let out into beds of sand, moulded to the forms required. A pig of iron is three feet and a half in length, and weighs one hundred pounds.

Furnaces.

Before the introduction of coke for the smelting of iron, the number of blast-furnaces was *four*, and their aggregate produce was eight hundred tons of pig-iron annually.

In 1788, one charcoal blast-furnace only remained; and *seven* furnaces, in which coke was consumed, had been established. The total annual produce of pig-iron had risen to four thousand five hundred tons.

In 1796, the blast-furnaces were *ten*, and their annual produce had increased to seven thousand six hundred and fifty tons.

In 1806, the number of furnaces was *eleven*, and their estimated annual produce ten thousand tons.

In 1825, fourteen furnaces were in blast within this county, yielding about nineteen thousand one hundred tons of pig-iron.

In 1827, the number of blast-furnaces was *fifteen*, and their produce may be stated at twenty thousand eight hundred tons.

The number of blast-furnaces in work, has been recently reduced to

fourteen, and the pig-iron manufactured from them, within the present year (1829) will probably not exceed twenty thousand tons.

The total number of blast-furnaces in Derbyshire is nineteen, five of which were out of blast in the beginning of 1829.

Butterley Works.

The celebrated Butterley Company possesses numerous and extensive works. At Butterley, there are furnaces, a foundery and steam-engine manufactory: at Codnor there are furnaces, a foundery and bar-iron works: at these places, together with the Ormonde, Portland and Heanor collieries; the ironstone mines connected therewith; the Crich limestone quarries and lime-works, and the Codnor Park lime-works, there are at present nearly fifteen hundred men employed. This number necessarily varies with the state of trade. Half are employed in the mines and the rest in the iron works and other manufactories. There are now (March, 1829) two furnaces in blast at Butterley and two at Codnor Park, producing on an average thirty-five tons of pig-iron per week at each furnace.—The wages paid to the different classes of men vary considerably. The following may be about the average. Ironstone-getters, 12*s.* to 14*s.* per week: colliers 15*s.* to 20*s.* In each of these two classes a great number of boys are employed, whose wages vary from 4*s.* to 12*s.* per week, according to their ages. Labourers 12*s.* per week: furnace men 17*s.* 6*d.* to 21*s.*: moulders 18*s.* to 21*s.*: smiths 18*s.* to 21*s.*: carpenters 16*s.* to 20*s.*: model-makers 18*s.* to 24*s.*: engine fitters, turners and other mechanics, about 16*s.* to 24*s.*: quarry men 12*s.* to 15*s.*

The massive and magnificent castings executed at Butterley have been numerous, and have bestowed a celebrity upon the enterprising and skilful proprietors, which, being shared by the county, renders the iron-works of Derbyshire the subject of admiration to distant nations. Among these works are the following:—The Vauxhall iron bridge: a cast-iron bridge to cross the river Gompta, at Lucknow, in the East Indies, for His Highness the Nabob of Oude: the iron roof for the Rum-quay, West India docks: bridges and other works for the West India docks: the cast-iron colonnade in front of the Opera House, London: the iron bridges for the harbour of Dublin, and iron roofs for the king's warehouses in that city: the iron bridge for Leith harbour: the iron bridges, lock-gates, and other works for the Caledonian canal: a considerable part of the cast-iron works for his majesty's dock-yard and storehouses at Sheerness.—During the war, iron shot was made at the Butterley works for the king's service. At the same manufactory was made the whole of the large main of pipes to supply the city of Edinburgh with water; as well as numerous pipes for the great water-work companies and gas companies in England, and those of the water-works at the Cape of Good Hope. Besides many steam engines for collieries, factories, mills, &c. several powerful ones were made at Butterley, for draining the fens at Misterton, near Gainsborough, by which the perfect drainage of more than 50,000 acres of land has been effected. The steam engines applied to vessels for the purposes of navigation which have been executed at these works are numerous. And a vast number of steam-engines, sugar-mills and machinery has been sent by the Butterley Company to the West Indies, the Mauritius and other colonial states. The Butterley Company employs twenty-six steam engines

CHAP. 5. Iron. Alfreton Works.

from one hundred and sixty to eight horses' power: the aggregate power amounting to more than that of seven hundred horses.

The Alfreton Iron Works are situated within the hamlet of Riddings, in the parish of Alfreton. They consist of two blast furnaces for the manufacture of pig-iron, and an extensive foundery for the conversion of a part of this produce into castings. During the late war, these works were employed almost exclusively in furnishing cannon-shot and shells for the service of government; of which three thousand one hundred tons have been sent to the royal arsenal at Woolwich in the space of one year. Similar castings continue to be occasionally supplied from these works for the board of ordnance, and for the East India Company. Now, however, the principal part of the produce of these works, not disposed of as pig-iron, is cast into retorts and pipes for gas works; pipes for water-works; castings for machinery; bridges and the general purposes of architecture. The retorts made at Alfreton have obtained considerable celebrity on account of their durability. Three collieries are connected with this establishment; which, besides supplying the iron works, contribute largely towards the general consumption of coal in the midland counties. Eleven steam-engines are in use on the different departments of the works, and from six to seven thousand yards of rail-road. The number of men employed is about five hundred. Three hundred and fifty of these are connected with the ironstone works and collieries, and the remainder with the blast furnaces and founderies. The earnings of the labourers vary from 1*s.* 8*d.* to 2*s.* 4*d.* per day; of the mechanics, founders and furnace men, from 3*s.* to 5*s.*; of the colliers and ironstone getters, from 2*s.* 6*d.* to 4*s.* 6*d.* according to the nature of the work and the ability and experience of the individual.

Our limits will not allow us to describe more particularly these important establishments. Our intention is rather to enumerate the prominent objects of interest which this county contains, than to anticipate the researches of the intelligent enquirer. It will suffice therefore to mention, in this place, that the Brampton and Chesterfield founderies are more eminent for the useful and tasteful articles of domestic convenience, than for more ponderous castings, as are those at Derby, Dronfield, Millford and Renishaw. The foundery of Messrs. Weatherhead, Glover and Co. in Derby, has been distinguished not only for the elegance of the domestic castings, but for the superiority of its architectural works and ornamental vases. The gothic church-windows and columns executed at this foundery have been esteemed perfect specimens of this art, and are proofs of the capability of its being applied to the loftiest designs of the builder. The churches and chapels in which these elegant gothic window-frames, &c. have been affixed, are those of Portsea, in Hampshire; Bordesley, near Birmingham; Walsall, Burton and West Bromwich, in Staffordshire; Kidderminster, in Worcestershire; Ashton-under-Lyne and Oldham, in Lancashire; and the new church (St. John's) in Derby. At this foundery there is now making an elegant cast-iron temple, for the gardens of the Earl of Shrewsbury, at Alton Abbey. The Derwent foundery in Derby (of which Mr. Gibson is the proprietor) has long been in high repute for the domestic and engine castings there manufactured.

Brampton, Chesterfield, Derby, &c. Furnaces.

Forges.

Besides the founderies already mentioned, there are in this county nine

Iron.

iron forges, where are made wrought iron bars, rods, sheet plates, &c.; and at Derby are the iron and copper works of Messrs. Bingham, Humpston and Co. These mills were established in 1734, for preparing iron for various uses, and for the purpose of smelting, rolling and preparing copper for sheathing vessels, and sheet-iron and tin. There is also the wrought-iron steam engine boiler manufactory of Mr. Harrison, St. Mary's bridge, Derby; at this manufactory boilers are made from one to one hundred horses' power, steam kitchens, and every other description of wrought-iron boilers, brewing and bleaching pans, gasometers, hot-air stoves or cockles for heating mansions, &c. roasting and steaming apparatus, and every kind of lock and smith's work. Mr. Harrison is now engaged in making a wrought-iron tank, for the Nottingham gas company, forty-two feet in diameter and eighteen feet six inches deep, that will hold 193,082 gallons of water, and estimating the pressure on the bottom to be $8\frac{1}{2}$ *lbs.* to the inch, the weight will be $910\frac{1}{2}$ *tons.*—The tank is estimated to weigh thirty-six tons when complete, and it is undoubtedly the largest ever made in this county. Mr. Harrison also erects vineries, peach houses, pine-pits, conservatories, green-houses, &c. which he heats by steam or hot air.

Forges, &c.

The manufactory of Messrs. Fox and Son, City Road, Derby, on the banks of the Derwent, is highly interesting for the display of superior ingenuity in the command and application of power imparted to various engines. This is principally seen in cutting and planing iron, and in his admirable iron lathes, which are from £200. to £800. value.

Iron implements and tools of various descriptions are made at different villages in the Scarsdale Hundred, bordering upon Yorkshire, and are actually considered to be under the jurisdiction of the master cutler in Sheffield; and this portion of the county is included by the Rev. W. Hunter in that district which is termed Hallam-shire, and which is the subject of his ably written history. The principal places alluded to are Dronfield, Norton, Eckington and the villages belonging to those parishes. From this neighbourhood, scythes, sickles and all sorts of farming implements are exported to America, Russia, Poland, &c. and are sent to all parts of the United Kingdom.

Iron Implements.

A process was discovered some years ago, by which cast-iron could be either softened or converted into steel, and was very much practised at New Brampton, Dronfield and Unston. It was applied to such articles as knives, forks, razors, &c.* which injured the regular steel workers, without being of public benefit. Many of these spurious goods were exported to foreign countries, where they lessened the high reputation which our hardware had attained; and now by orders of the master cutler and the manufacturers of Sheffield, this process is greatly restricted, by all cutlers being compelled to stamp their manufactures, with a particular mark.

The nail manufacture has been a very ancient branch of the iron trade in this county. It is at present carried on extensively by Messrs. Mold and Co. and by many other masters at Belper, Chesterfield, Derby, Eckington, Wirksworth, and other places; the number of hands employed in this business are from three to four hundred.

Nails.

* The cast-iron goods were first made at Duffield.

CHAP. 5. Iron Screws. There is a curious and interesting mill for the manufacture of common screws, at Hartshorn, belonging to Messrs. Smith, Port, Wood and Co. It was originally a branch of a similar manufactory at Burton-upon-Trent. Numerous hands are employed, and many hundred gross are made per week, by means of engines and lathes, turned by a water-wheel. These screws are of various sizes, weighing from half an ounce to thirty pounds per gross. Many children are employed, and wages vary according to age and dexterity.

Needles. At Hathersage there is a celebrated manufactory of needles, conducted by Messrs. Cocker and Sons, and at Derby there are seven or eight master needle makers.

Tin-plate Workers. Tin-plate workers are numerous; at Messrs. Cox, Poyser and Co. of Derby, tin pipes are made, and plates of every dimension are manufactured at the slitting and rolling mills of Messrs. Evans, Humpston and Co. in the Morledge, Derby.

Calamine Works. At Cromford, there are calamine works belonging to the Birmingham Brass Company, where from three to four hundred tons of this metallic substance, are prepared annually for the service of the brass-founders, from ores found in that neighbourhood. The Cheadle Brass Company have also works of the same nature in Bonsal Dale. The refuse of this ore, mixed with quick lime, makes a mortar which sets extremely hard, and is used by Messrs. Arkwright in their mills.

Brass Foundries. There are eight brass founderies in Derbyshire; situated at Derby, Millford and Ashbourn; and at the last-mentioned place, clock-brasses are manufactured by Mr. John Frith and by Mr. Robert Harlow, in so superior a manner, that they are in request throughout the kingdom.

Coals. We have already, in our second chapter, described the great coal field extending along the eastern boundaries of this county, and have given a list of the principal collieries. The trade is extensively carried on by means of canals and rail roads; and both the consumption within Derbyshire and the export of coals to other counties are very great. The principal coal owners, or, as they are generally termed, *coal-masters,* are the Duke of Devonshire; the Earl of Chesterfield; William P. Morewood, esq.; Court Dewes, esq.; Godfrey Booker, esq.; the Butterley Company; D' Ewes Coke, esq.; E. M. Mundy, esq.; James Oakes, esq.; Robert Holden, esq.; the Old Denby Company; John Gorrell Barnes, esq.; G. Hodgkinson Barrow, esq.; Messrs. Smith and Co. Chesterfield; Walter Gisborne, esq.; Messrs. Samuel and Thomas Potter, of Ilkeston, &c. &c. The price of coals, at present, is from 7*s.* 6*d.* to 14*s.* per ton, on delivery in Derby. In the year 1693, according to Mr. Arthur Young, the price of coals in Derby was to the consumer 3½*d.* per cwt. or 5*s.* 10*d.* per ton. The number of colliers employed are between five and six thousand.

Many of the coal-seams in Derbyshire and its environs, have considerable quantities of brasses or drosses in them, which are lumps of iron pyrites. These are selected out at several collieries, and sold to the makers

Copperas. of *copperas, green vitriol* or *sulphate of iron,* of which there are two manufactories at Brimington, one in Dore (Barber-fields) one at Newhall, and there is also one at Staveley.

Marble. Of the natural wealth of this county the marble may be mentioned as

one of the constituents. It is a beautiful calcareous substance, and is found in various parts of the High and Low Peak. The black marble of Ashford is capable of receiving an extraordinary high polish, so as to reflect objects as brightly as a mirror. The mottled and veined grey marble, varying in tint from a faint blue to an azure-purple, is obtained in large quantities near Monyash. The figured marble, abounding with shell-petrifactions (entrochi, anomites, corals, &c.) the sections of which display an endless diversity of figure, is found also at Monyash, Ashover, Hassop and at Slaley near Bonsal. There are marble works at Ashford and at Derby, where this material is wrought into articles of domestic elegance and into monuments. Chimney-pieces are sold at various prices, from 30*s.* to upwards of £60. and beautiful tables of black marble, enriched with elegant engravings, are also made there.—The saw-mills for cutting marble and free-stone into slabs were first established at Ashford, by the late Mr. Henry Watson, of Bakewell, nearly a century ago. Marble.

In the limestone rocks is found the substance called, petrosilex or chert. This when white and pure is known by the name of china stone, and is sent off in very considerable quantities to the Staffordshire potteries. Most of the limestone and chalk districts produce this material, but that from the neighbourhood of Bakewell, Little Longsdon, Wirksworth, Buxton, Peak Forest, Matlock, Calver, Ticknall and Crich is most esteemed. China Stone.

The lime works are of considerable importance to this county, and large quantities of this article is carried by canal conveyance into the adjoining counties, both for manure and building purposes.* Lime Works.

The freestone or building-stone quarries are very numerous in Derbyshire. At Wingerworth there is a valuable bed of freestone, which is extensively manufactured by water and steam power, into chimney-pieces, staircases, &c. This stone is known and highly valued in London and other places. The Hopton-wood stone is also in great estimation. At the Lea-wood delph or quarry, blocks of building-stone are sold at 6*d.* per foot cube; the price at Belper is 8*d.*; and at the Priory, near Breadsall, a fine solid stone is procured, wholly free from clay, that is sold as high as 10*d.* —Some of the gritstone rocks afford an excellent building-stone, and that from the yellow limestone strata is durable. The shale freestone is found variegated with concentric streaks, of an orange colour or dingy red, and chimney-pieces are sometimes made of it.—Flag-beds of paving stones, which split plane and flat, and require little labour are also numerous. The price at the quarry is from 12*d.* to 20*d.* per superficial yard. The most perfect are those in the gritstone rocks. Freestone.

There are about twenty grindstone quarries. The stone differs considerably in its quality, but is all serviceable either for grinding fine tools or for coarser purposes. At Corbar near Buxton and Stanley, very fine grindstones are made, while the large coarse stones from the Gregory quarry in Overton, are in extensive demand. The average value is about two pounds or two guineas per ton. Some of these quarries furnish whetstones and scythestones; the latter at 10*s.* or 12*s.* per long hundred. Grindstone.

The gritstone rock, so abundant in the northern districts of Derbyshire, Gritstone.

* For a list of the limestone quarries and kilns, see page 85.

CHAP. 5. Gritstone.

supply the farmer, the builder and the artisan with much useful material, and at Stanton in the Peak and at Birchover, the grit rock is found porous, and is in request for filtering cisterns and other vessels.

Slate.

The quarries producing slate or tile-stones are numerous. The general price of the slate at the quarry is from 54*s.* to 70*s.* per rood; the rood being sufficient to roof in forty-four square yards. At Cobourn quarry, in South Winfield park, the slates are remarkably large and coarse, some of them are more than a yard high, and are used as eaves slating and even as fences.

Plaster-stone.

The gypsum, alabaster or plaster-stone is, by the geologists, classed among the *earths*, and is no where found in greater purity than in the red marl strata of this county. There are four gypsum pits on the south-east side of Chellaston, belonging to Mr. Henry Orton and Mr. George Wooton. There is also a pit at Aston, and another at Ballington Hill near Ambaston. The principal demand for the pure white gypsum or that slightly streaked with red, is made by the Staffordshire potters. This sells at 10*s.* per ton; but some particularly fine blocks are purchased by the makers of alabaster ornaments and by statuaries, as high as 30*s.* and upwards per ton. The columns in the mansion of Lord Scarsdale, at Kedleston, are formed of this material. The inferior sort, of which plaster floors are made, is called flooring stone, and is sold at from 5*s.* to 7*s.* and 10*s.* per ton.

Spar Works.

The spar works of Mr. Hall at Derby, together with the museum at Matlock, are gratifying objects of curiosity, taste and science. The fluor spar, or as it is termed blue john, is an elegant natural production. The only mountain where it can be obtained in sufficient abundance and quality for the purposes of manufacture, is situated westward of Castleton, between Mam-Tor and the eminences that compose the Long Cliff. Its price is about £40. per ton. Some of the pieces of fluor are a foot in thickness, and have four or five different veins, but such large pieces are very rare. In general they are only about three or four inches in thickness. The deep violet is the most common kind, but in some pieces a fine yellow tint prevails, and in others a pale rose-colour. The acid obtained from fluor spar is more powerfully corrosive than any other, and is used in engraving upon glass. The natural colours of the spar are greatly affected by heat. At the spar-manufactories in Derby, this elegant material is worked into a variety of ornamental and useful articles, such as vases, cups, necklaces, ear-drops, &c. Thousands of these necklaces, ear-drops and other ornaments are exported to foreign markets, and are from thence dispersed into different parts of China, South America and the Indies. There are also similar manufactories at Buxton, Castleton and Matlock Bath. The coarse, discoloured and inferior kinds of this spar, are in great demand at the founderies as fluxes of the ore. From Knowles' mine great quantities are sent to the Ecton copper works; and the furnaces at Butterley and Somercotes are supplied from the Crich Cliff pits.

Bricks and Tiles.

Bricks and tiles are made from the red marl, with which the more fruitful part of Derbyshire abounds; particularly from the tenacious portions of that earth. From the grey clay of Brassington, which is a decomposition of toadstone, tiles have been made, resembling the flat slate-like tiles of Staffordshire. Draining tiles and pipe-bricks are made at Newton Solney, where the former are sold at 20*s.* per hundred; and the latter at

various prices, from 4*d.* each to 35*s.* the thousand. At Ashover, Bolsover, Swadlincote and other places, fire bricks are manufactured for sale and are in great repute; and at Swadlincote arch-bricks are made for reverberatory furnaces, and round tiles for the use of the bar-iron manufacturers. Excellent bricks for building are made at Derby and in its neighbourhood. CHAP. 5.

The tobacco-pipe makers, who reside chiefly in Derby, Bolsover, and New Brampton near Chesterfield, obtain much of the raw material from Bolsover, Killamarsh, and Chellaston Hill. Tobacco-Pipes.

The Derbyshire diamonds are small detached and perfect crystals, consisting of an hexagonal prism terminated by pyramids. They are found at Buxton, Castleton, Miller's-Dale near Priestcliff, &c. They are generally imbedded in toadstone strata, where sometimes have been found small specimens of calcedony, jasper, terra-vert and even onyxes. Many valuable stones are also found in a small brook that runs through the village of Packington. Derbyshire Diamonds, &c.

The art of the lapidary or jeweller is said to have been introduced into this town by Mr. Obijah Mellor, about the middle of the last century, and yet there exist some uncertain traditions that assign to it a much higher antiquity; and it is not improbable that the stones found in the High Peak tempted the researches of lapidaries from very remote periods, until the real value of those stones was correctly ascertained. The present lapidaries and jewellers are Mr. F. Severne, Mr. E. Simpson and Mr. W. Moore. The articles manufactured by them are esteemed little inferior to the best workmanship of London. They employ about one hundred hands, and the wages are from 12*s.* to 22*s.* per week. Jewellery.

The porcelain or china manufactory of Derby has placed the reputation of this country on a level with that of Saxony or France for the production of this elegant article; and superior to any other, for the finish and taste of the execution. This manufacture was introduced here about the year 1750, by Mr. W. Duesbury, who fabricated numerous elegant and costly articles, among which was an elegant dessert service, consisting of one hundred and twenty pieces, for his present Majesty, when Prince of Wales. The fineness of the material has subsequently been greatly increased, and much superiority in the colouring has been attained. The blue and gold had been brought to the highest degree of beauty, and now the green, in which alone this porcelain was surpassed by foreigners, is possessed of the highest degree of delicacy and lustre. The body of this elegant ware is fine clay, combined with fluxes, and is chiefly brought from Cornwall. The best kind is completely fusible. The biscuit figures are peculiar to this manufacture, and are in high estimation in almost every part of the globe. The urns, vases and ewers produced in this manufactory are from classical designs, and are adorned with landscapes, portraits and figures by some very superior artists. Among the splendid services executed at the Derby china works, the following may be enumerated:—one for the Earl of Shrewsbury, embellished with fruit-subjects, upon a rich ground of the chrome-green; another for the Duke of Devonshire, which was enriched with original views of Chatsworth, Hardwick, &c. Elegant services for Lord Muncaster, and for Lord Ongley, were richly and tastefully embellished with historical designs. In 1819, a service consisting of numerous bowls Porcelain or China Works.

CHAP. 5. China Works.

and dishes, for the Persian ambassador, was executed in a style of superior splendour: the ground was gold, chased and inscribed with Persian characters. Mineral colours only are used in painting porcelain, and it is finished with a rich enamel. The gold with which it is splendidly ornamented is reduced to a liquid previously to being laid upon the different articles to which it is applied; they are then committed to the fire, when the gold reassumes a solid form, and is afterwards brilliantly polished.

Earthenware.

Red earthenware is made at Alfreton, Church Gresley and Ticknall. At Swadlingcote and Hartshorn white and yellow-ware is manufactured. Near Chesterfield there are extensive factories for white, brown and redware and stone bottles; and in the same neighbourhood large water-pipes for drains are made. At Belper-Gutter and Denby, there are two manufactories for stone-ware, bottles, pitchers, &c.

Malt and Ale.

We have good authority for saying, that the business of malting was carried on in Derbyshire at a very ancient period. The art and trade of brewing seems also to have been understood at an early era, and as the word *ale* may be fairly derived from the Danish *oel*, it does not seem unlikely that some kind of beverage from fermented corn, was introduced into this county by that people, who for some time held possession of Derby. It cannot be affirmed that the malt-trade was carried on very extensively in this county before the sixteenth and seventeenth centuries, and we observe that *Deering*, in his History of Nottingham, mentions that town as having enjoyed the malting and malt-liquor trade for several ages without any competitor in the midland part of the realm. Mr. Woolley, however observes, in his manuscript history, under the date 1712, "the principal trade of this town (Derby) is that of malting, with which they supply a great part of Cheshire, Staffordshire and Lancashire, by which many good estates have been raised; as also by the trade of a baker, this town supplying most of the Peak country with bread of hard corn, they having none but oats amongst themselves. This town is famous for very good ale, which the brewers send to London and other parts to good advantage."

Wool.

The woollen manufactories were established at very early periods in this and the neighbouring county of Nottingham, as appears by a Charter granted by King John in the year 1199, which conferred on the burgesses of Derby and Nottingham the exclusive privilege of dying cloth. This rather proves the antiquity of the dyers' trade in these two towns, than of the manufactures. A proclamation was made in 17th Edward III. to carry into effect a previous resolution of parliament, expressly for the protection of the wool-trade of Derby, which ordains that no person whether native or foreigner shall purchase wool at a lower price than 9½ marks per sack, that being the price established in the county of Derby. This shows that the wool of this county was considered sufficiently important to take the lead in fixing the general price of that article, or that Derby had the reputation of being the staple town for the disposal of native wool. It is remarkable that about the period of this proclamation, the conquest of Calais, where a mart for the wool of Flanders had long existed, had introduced much foreign wool, and thus diminished the price of the home-grown commodity. Edward perceived the advantages of this intercourse, and notwithstanding this protecting edict, he incorporated a company of wool

merchants, under the name of the merchants of the staple, and ordained that the price fixed by them at Calais should be the regulating value. This company maintained its station and extended the home and foreign wool trade with much advantage to the country, keeping up a continued correspondence with agents in Derby and Nottingham, until the loss of Calais, under Queen Mary, when that channel of prosperity to this town gradually declined.

Wool.

Wool in Derbyshire is sold either by the stone of 14 *lbs.* or by the tod of 28 *lbs.* There are no fairs expressly for the sale of the wools of this county, though some persons have at times advocated such an establishment, and formerly the July fair at Chapel-en-le-Frith was noted for the sale of this article. It is customary for the wool-staplers to go from farm to farm. The wool of the woodland sheep has been sold by Mr. Charles Greaves of Rowlee, as high as 42*s.* per tod; and the wool of the small forest-breed, sells for half as much more as the new Leicester wool. Mr. W. B. Thomas of Chesterfield, interested himself, earnestly, in introducing the Merino breed into this county, on his farms at Boythorpe, Brampton and Baslow; and in 1810, his late Majesty honoured his patriotic endeavours, by presenting him with two fine Merino ewes. In 1812, Mr. Thomas clipt three hundred and eighty-six fleeces, which sold for £340. 7*s.* (besides £22. 5*s.* 6*d.* for lambs' wool) averaging nearly 17*s.* 8*d.* for the wool of each sheep, through the whole flock.*

Fulling Mills.

By the charter of Grants of Queen Mary in 1555, there appears to have been three fulling-mills on the river Derwent, which stood on the flats, where the old silk mill was afterwards erected; and the name of the "Full-street" still points out the particular part of the banks of the river, where the fullers carried on their branch of the wool-manufacture. Fulling-mills are now in use at Glossop, Simond-ley and other places.

Woollen Cloth.

It is within the last century that the manufacture of woollen cloth has been practised in this county on an extensive scale, but there are at present, numerous establishments for the various processes of yarn-spinning, weaving and cloth-dressing; and in that part of Glossop-dale which borders upon Yorkshire, broad and narrow cloths are fabricated equal to those of any other district in England. This vale, romantically situated, contains the

* We have in our last chapter, page 215, spoken more fully of the attention of Mr. Thomas to the introduction of Merino sheep; and we have recently been favoured with a letter from that patriotic gentleman relative to the Merino wool, from which we make the following extract. "Merino sheep, before the ruinous reduction of the foreign wool-duty, did well in this county, both for the flock-master and the manufacturer; and the prices previously obtained from the English manufacturer by the *Spanish* farmer, as well suited the *English* farmer. I myself had above three hundred head of Merino sheep, from the flocks of Spain imported into this country by his late Majesty, Lord Somerville, Sir J. Banks and by George Tollett and Benjamin Thompson, esqrs. My flock averaged above 4 *lbs.* a fleece, through; and I sold at various remunerating prices, from 7*s.* 6*d.* per *lb.* down to 4*s.* but the mischievous and visionary principles of free trade, between this high-taxed and high-tithed kingdom against non-taxed and non-tithed countries, which have been so warmly advocated by Mr. Huskisson and other political theorists, just then beginning to be *fashionable* (though not now, thank God, so fashionable as they have been) Spanish wool was allowed to be imported into this country at a mere *nominal* duty. From that moment, no English farmer could afford to grow it on their high-taxed and tithed farms, so as to compete with the foreigner, who sent his wool from a comparatively untaxed and untithed country; and hence the majority of *English* fine-wool-growers, immediately gave up the pursuit, solely for want of that protection and encouragement, which I humbly contend they richly deserved. *W. B. T.*"

CHAP. 5. Worsted Spinning, &c.

cloth-works of Chunal, Hayfield and Simond-ley.—Worsted-spinning for the hosiers is carried on at Litton, Lea-wood, Melbourn and Tideswell, and at St. Werburgh's in Derby there are mills for this operation.—Blanket and carpet weaving have been undertaken in this county, but we believe not with the success expected by the enterprising speculators. Fustians and stuffs are made at Ollerset in Glossop-dale, at Tideswell and at Woodthorpe.

Flax and Linen.

There are manufactories of linen in Derbyshire, but the growth of flax has not been so successfully attended to, as in the opinion of many intelligent persons it might have been. The cultivation of this useful plant has, however, not been wholly neglected, and in the moist meadows amid the moor-lands of Scarsdale, that cultivation has been generally successful. There are flax spinning mills at Kelstedge, Toad-hole, Charlesworth, Matlock, &c. and the linen-thread or yarn is woven into sheeting, checks and similar fabrics at Belper, Kelstedge, New Brampton, Chesterfield, Chapel-en-le-Frith, Wirksworth, Creswell in Whitwell, &c.

Hemp.

Hemp is not cultivated in any part of this county. There are however numerous rope-walks and rope and twine mills. The entrance into the Peak Cavern at Castleton is celebrated for its small cord makers, whose rude appearance and movements in the gloom of the terrific archway, are appropriate to the scene. At Clown and Chesterfield, there are manufactories for the weaving of sacking, sail-cloths, hop-bags and other coarse articles; and rope-walks at Derby, Wirskworth, Bakewell, &c.

Stockings.

Stockings were in former times, generally, if not entirely made of worsted, and were knitted by hand; but for many years past, stockings intended for sale are frame-woven. In Derbyshire very few, if any, worsted stockings are made on the frame; and the framework-knitters of this county may be divided into two branches; namely, those who work in silk and those who use cotton only. In the silk branch there are eight hundred and fifty persons employed; in the cotton, not fewer than *six thousand, five hundred.*—The stocking-frame was invented towards the close of the sixteenth century, by Mr. William Lea, M. A. of St. John's, Cambridge. He was born at Woodborough, a village about seven miles from Nottingham. It is related that he became enamoured with a lovely stocking knitter, who instructed and employed young girls in the same business. She rejected his addresses, and her admirer, in revenge of his slighted affections, conceived the design of inventing a machine that should render the hand-knitting of stockings a profitless employment. He produced the stocking-frame in 1589, and taught his brother and some of his nearest relatives the use of it. Having for some years practised this new art, at Calverton, a village about five miles from Nottingham, he proceeded to London, and solicited the protection and encouragement of the court. This was either at the latter end of the reign of Elizabeth or early in that of James I.; but though he and his brother are said to have made a pair of stockings in the presence of the sovereign, his invention was discountenanced, upon the grounds that it would tend to deprive hundreds of the industrious poor of their usual means of maintenance. The value of such improvements, by which the productions of industry might be increased, was not then understood in this country, and France was the place where

Framework-Knitting.

the aid of machinery in various species of manufacture was beginning to be sought after. There Mr. Lea, at the invitation of the illustrious Henry IV. went with nine workmen, and settled at Rouen in Normandy. The murder of that monarch, and the intestine troubles of the kingdom destroyed the expectations of Mr. Lea, who ended his days at Paris; a victim, it is said, to disappointment and grief. Seven of the workmen returned to England, and under the direction of a person named Aston, who had considerably improved upon the original invention, the foundation of the manufacture was laid in England.—The two workmen who remained in France attempted in vain to obtain encouragement; and endeavours were made with very little success to introduce the framework-knitting into Italy and Holland. The art, in the mean time, began to flourish in this country, and during the Protectorate, the framework-knitters petitioned Oliver Cromwell, to be incorporated by charter. In this petition, which is composed with much intelligence and spirit, they style themselves "the promoters and inventors of the art, and mystery or trade of framework-knitting, or making of silk stockings, or other work in a frame or engine."—They wrought (as appears by the petition) generally, if not entirely in silk, that material being "the best and richest of all others in use and wearing, and most crediting the artisans, and of the greatest advantage unto this State and Commonwealth, yielding several payments to the use of the State before it passes out of the hands of the traders therein, and increasing merchandise by both the ways of importation and exportation of the self-same material, imported raw at cheap rates; exported ready wrought at the utmost extent of value: so that the difference of those valuations is totally clear gain to this Commonwealth, and esteemed upwards of six parts in seven of the whole quantity of this material in the highest value thereof, wrought up by this manufacture; which has vindicated that old proverbial aspersion:—*the stranger buys of the Englishman the case of the fox for a groat, and sells him the tail again for a shilling.*—And may now invert and retort upon them:—*The Englishman buys silk of the stranger for twenty marks, and sells him the same again for one hundred pounds.*"—Cromwell did not grant the prayer of their petition, but they obtained a charter from Charles II. soon after the Restoration, by which the exercise of their manufacture was restricted to a company, with a jurisdiction extending ten miles round London. In process of time, this company established commissioners in some county towns, where they compelled the country framework-knitters to purchase their freedom; but a spirited Nottingham artisan determined to try the question in a court of law. In this process, the company was cast, and the stocking manufacture has, since that occurrence, continued to be entirely open. Since the dissolution of the company, the manufacture of stockings gradually declined in London and spread itself into various parts of the country. At Leicester, in particular, it flourished greatly during the early part of the last century, but the finest work was made at Nottingham and Derby. Some framework-knitters established themselves in Towcester in Northamptonshire, and at Godalming in Surrey.

Derby Rib.

This manufacture, which had been introduced into the town and county some time in the eighteenth century, acquired additional celebrity by the ingenious discovery of Messrs. Jedediah Strutt and William Woollatt,

CHAP. 5. Derby Rib.

who, in the year 1758, produced a machine for making ribbed stockings. This was termed the Derby rib. From an imperfect idea furnished by a common workman named Roper, these ingenious gentlemen brought this important improvement to perfection and obtained a patent, which gave them the exclusive use of it during a term of fourteen years. A kind of ribbed-work had been introduced in the knitting of stockings, even before the invention of the stocking-frame, and it has been asserted that a pair of ribbed stockings had been made by a man named Wright, at Ilkeston, in the year 1730, and by an old stocking-maker of Dale Abbey. The following account of the invention is from William Strutt, esq. "It was Jedediah Strutt, my father, who invented the Derby rib machine in the year 1758, or thereabouts. About that time he settled in Derby for the purpose of carrying on the manufacture of ribbed stockings, in conjunction with his brother-in-law Mr. Woollatt, who was then a hosier in that place, and which partnership continued until the death of my father, in the year 1797. A great part of the time during which the patent was in force, Mr. Samuel Need of Nottingham was a partner, under the firm of Need, Strutt and Woollatt. The patent-right was tried twice in Westminster-hall: first, with the hosiers of Derby, and afterwards with those of Nottingham; from which time it was enjoyed quietly to the end of the term."—This improvement has suggested others, and from it has arisen the art of making open-work mittens and various fanciful articles.

Improvements in the Stocking-frame.

The stocking frame invented by the Rev. William Lea or Lee, of Calverton in 1589 was very simple, with jacks only, and was a *twelve-gage:* the improvement introduced by Aston of Thoroton, who was originally a miller, consisted in applying the lead-sinkers, which are still in use. Needham, a London framework-knitter, placed the trucks on the solebar, and in 1714 another London workman, named Hardy, added the caster-back and hanging-bits; and thus may be said to have brought the stocking frame to all the perfection of which it is capable, for nothing that has subsequently been devised has added any power or facility to its operations. The Derby-rib-machine, applied to the stocking frame, is known among the framework-knitters as the one-and-one, and the two-and-one rib machine; the invention of which, by Mr. Jedediah Strutt, has been already mentioned.

Hosiers.

Messrs. Ward, Brettle and Ward of Belper, are esteemed to be the most extensive manufacturers of hosiery goods in the world. They employ about four hundred silk-stocking-frames, which produce two hundred dozen pairs of hose weekly, besides two thousand five hundred cotton-hose-frames, which on the average produce nine pairs each per week, making on the whole little less than *one hundred thousand dozens* yearly. The other eminent hosiers of this county are the Messrs. Fox, Byng, Bowmer, Peet, Longdon, Moorley, Hewit, &c. of Derby; Mr. Robinson of Chesterfield; and Mr. Carrier of Ilkeston.

Knitting of various articles.

The principle of the stocking frame was applied to the knitting of various articles in the course of the last century. In 1766, a person named Crane manufactured a rich brocade for waistcoats on a similar frame, and about two years afterwards he attempted vandyke-work, by appending a warp-machine to a plain stocking frame. In 1769, Mr. Robert Frost, who, we believe, is still living at Arnold near Nottingham, invented the figured

eyelet-hole machine, and in concert with Mr. Thomas Frost, now of Worcester, obtained patents for various inventions, which gradually led to the net and lace frames.

Lace Machine.

The first machine for making lace from a stocking frame was contrived in 1777; and the invention of it was disputed by Mr. Robert Frost, and a poor operative of Nottingham, of the name of Holmes. This was superseded by the point-net machine, the offspring of the ingenuity of Mr. John Lindley, senior; at whose death, Mr. Thomas Taylor, of Chapel-bar, having improved upon the principle, took out a patent. This subsequently was further improved by Mr. Hiram Flint, but it has been almost wholly superseded by the warp and bobbin net. About thirty years ago* the whole, or nearly so, of the lace made by machinery, was produced from what are termed point-net machines; a machine probably more delicate in its construction than any other that was ever used for manufacturing purposes, either in this or any other country. At the commencement of the period above named, 1799, it had arrived at nearly its greatest point of perfection, and was extensively used; probably there might be nearly one thousand machines of that description at work.

Point-net Machine.

In the year 1802 or 1803, the manufacture of lace-net from the warp-machine was resumed with success by some individuals in Nottingham. This kind of lace had been previously made by an ingenious man of the name of Dawson, the inventor of the brace-machine, but had been discontinued from some cause not generally known. Several important improvements were soon afterwards made, which caused this branch to extend itself rapidly, so that in the year 1808 it began to vie in some measure with the point-net.—Notwithstanding the hitherto successful progress of the lace trade, it was very properly considered, that the merit of Nottingham lace rested principally upon its being an imitation of bobbin or cushion-lace. It was at the same time admitted, that this imitation was very imperfect, that the net was greatly inferior in strength, durability and transparency to that fabric: (these observations apply particularly to the lace made from cotton) and these facts induced many persons to turn their attention to the making of that article, by some process, possessing facility superior to the common method of making it upon the cushion.—Great encouragement being readily afforded by many individuals, particularly by Mr. Nunn, lace manufacturer of Nottingham, to any person who professed himself competent to construct a machine capable of making bobbin net, excited great interest and attention to the subject. Still it was considered generally, by sober-thinking persons, something like the study of the perpetual motion, as a ridiculous, fruitless enterprise. Amongst a number of persons whose attention was thus drawn to the subject, was John Heathcote of Loughborough, a stocking weaver by trade, who had made himself acquainted, in some degree, with the general mode of fitting up machinery in Nottingham, some time previous. To him must be conceded the distinguished honour of having brought into use a machine at all calculated to meet the expectations and wishes of the trade. Like many others, he

Improvements.

* The publisher is indebted to an eminent lace manufacturer for the ensuing very able account of the invention and introduction of the bobbin and carriage machine, with its application to steam-power and subsequent improvements.

CHAP. 5. Improvements.

was for a long time beating about in uncertainty, until, by a train of circumstances, which shall be afterwards explained, he fell into the right tract and success crowned his efforts. In the year 1809, he took out his famous patent; famous on account of the great sum of money, he in conjunction with his partner, Mr. Charles Lacey, had derived from it, as well as for its great importance in a manufacturing and commercial point of view, when considered as the parent of other more improved machinery, which afterwards followed.

Bobbin-net Machine.

To John Heathcote, therefore, has generally been attributed the invention of the bobbin-net machine, and far be it from us to detract in the slightest degree from any man, and particularly from one who has rendered himself useful to society, any portion of that merit: still justice is equally due to other parties, and we shall therefore adhere strictly to the sacred line she has drawn, and record, with impartial truth, facts as they are, however individuals may be affected by it.

Brown's Net Machine.

The invention, then, more properly belongs to Robert Brown, late of Nottingham, or to George Whitmore of the same place, his partner, or to both conjointly, who invented a machine, in or about the year 1803, for the purpose of making fishing nets. This machine possesses all the essential principles and properties of Heathcote's patent bobbin-net machine, and is, in fact, to all intents and purposes, a bobbin-net machine. To this machine must be traced the date of the invention and use of the bobbin and carriage; to this machine must be referred the method of using two divisions of threads, the warp and the bobbin; and to this machine, and certainly to this alone, must be attributed the important discovery of passing, or, as it is generally termed, twisting two divisions of threads with order and regularity, and without entanglement distinctly round each other. Robert Brown's patent for this machine was regularly specified and enrolled at the Patent Office, and therefore may be referred to by any individual who has any doubt as to the correctness of this statement. The idea of reducing the thickness of the bobbin and carriage, to a scale suitable to the manufacture of bobbin-net-lace, seems to have originated with a person of the name of Edward Whittaker of Radford, who was acquainted with the above-named Robert Brown, and had in consequence obtained a knowledge of his fishing-net-machine. Whittaker was assisted in his project by Messrs. Hood and Taylor, at that period lace manufacturers in Nottingham, who sent him over to Loughborough, partly with the view of removing him out of the reach of the Nottingham mechanics, but principally to place him with Mr. Hood's brother (Mr. Charles Hood) who was in business as a framesmith at that place, and who was to do the smithing work and to render what assistance he was capable of to Whittaker. In the course of time, Messrs. Hood and Taylor grew weary of the project and withdrew their support; in consequence of which, Charles Hood held the machine which Whittaker and himself had been constructing, for a real or pretended debt, and afterwards sold it to John Heathcote, for the paltry sum of 8 or £10.

Bobbin and Carriage.

Heathcote's Machine.

John Heathcote having thus obtained a knowledge of at least the principles of the machine he afterwards constructed, and probably but little more, he industriously applied himself, and in the year following or soon

afterwards, obtained his patent as before described. This machine, although it clearly demonstrates the possession of great mechanical talent in the inventor, is nevertheless remarkable for its complexity, for the number of its distinct movements, and for its circuitous method of effecting the end designed. Its imperfect mode likewise of making the selvages, and the use of stretchers (long strips of wood with pins at each end) for the purpose of preventing the net running in at the edges, which rendered it necessary for the workman to stop his machine every four or five holes, in order to adjust the bobbin, and replace the stretchers, occasioned the manufacture of lace upon this machine, comparatively speaking, necessarily slow and expensive. Still its advantages, compared with the method of making lace by the hand upon the cushion, were incalculable.

Heathcote's Machine.

The success of John Heathcote induced others to exert themselves and to follow in the same tract, and in the year following (1810) John Brown, of Nottingham, invented his traverse warp machine; a machine admirably adapted for making a number of breadths or narrow strips of lace, but not calculated for wide widths. This machine, although it likewise displayed great mechanical contrivance in the inventor, was nevertheless expensive and delicate in its construction, and the working and management of it were attended with difficulty.

Traverse Warp Machine.

In the year 1811, William Morley of Nottingham invented his straight-bolt machine; a machine much more simple in its construction, and in its movements more concentrated and easy: which, with the improved method of changing the situation of the bobbins upon the selvage, and the invention of the spur or selvage-wheels for the lace to run over, gave this machine great facilities and advantages over Heathcote's machine. Nevertheless, owing to the horizontal movement of this machine, which occasions an alternate tightening and slackening of the bobbin threads, an imperfection in the appearance of the net will be produced, unless care is exercised by the workman. In the same year, the pusher machine was invented, principally by Samuel Mart and James Clark, of Nottingham; the latter now resides in France. This machine was used, for a long time by several persons, with much success in making breadths or narrow edgings of lace. It certainly possesses advantages, which shall be afterwards named, but is delicate and expensive in its construction, and subject to many inconveniences, which render it unsuitable for general use. In the year following (1812) the circular-bolt machine was invented by the before-named William Morley, which machine has all the advantages of the straight-bolt machine, without the disadvantages.

Morley's Straight-bolt Machine.

Morley's Circular-bolt Machine.

In the same year, the leaver machine was invented, by John Leavers, sen. framesmith of New Radford, and ——— Turton, conjointly, of the same place. This machine, which on account of the strong resemblance it bears to Heathcote's machine in many of its prominent features, cannot be considered as forming a distinct principle, like the others before described: but may, without much impropriety, be designated a single tier Loughborough machine. It is, however, deserving of particular notice, on account of its general adoption by the trade. This machine, when originally constructed, stood in an horizontal position, something like a machine lying upon its side. This is supposed to have been done for the purpose of

The Leaver Machine.

CHAP. 5. Leaver Machine.

making it look as much as possible unlike Heathcote's machine, which the constructors knew it so much resembled, with the idea of evading his patent, rather than from any advantage it derived from that position; on the contrary, it was subject to many disadvantages, and was in consequence changed to its present upright form by John Leavers, jun. son of the above, some time before he went to France, where he now resides. The general appearance of this machine is unfavourable, its movements complex and its construction delicate; but these disadvantages are counterbalanced by the excellence of the net produced from it.

Improvements.

Many alterations and improvements have been since made by various individuals in lace machinery, but nothing that requires a particular description, except the application of it to power; the first attempt of which was made in 1818 or 1819, by John Lindley of Loughborough, who constructed a machine, possessing the properties of the lever and traverse warp machines combined. This machine he worked by a rotary movement, at Tottenham near London, in conjunction with Mr. C. Lacey, Mr. Heathcote's original partner; but the project did not answer; on the contrary, it proved ruinous to the parties. About the same time, John Heathcote applied the rotary movement to the circular-bolt machine, and established a manufactory upon that principle at Tiverton in Devon; and in a few years, several other establishments, emanating from the same place, commenced in that and the neighbouring county of Somerset, so that the number of manufacturers in the west of England are very considerable.

The individuals who have most distinguished themselves in improving lace machinery, and in rendering it capable of being worked with advantage by mechanical power, are John Heathcote, William Morley, ——— Sewel, William Jackson and William Henson. William Mosely of Radford attempted to work the leaver machine by a rotary motion, without success; and others who attempted to work the pusher machine and traverse warp, &c. met with no better fate. It is a remarkable fact, that hitherto no machine excepting those on the circular-bolt principle, have been found capable of being worked by mechanical power successfully.

The number of twist-lace machines at work in this country are about four thousand, and are still on the increase; the great bulk of them are on the circular-bolt and leaver principles, but it is difficult to say what proportion there are of each.

Heathcote's patent-machine, known by the name of the Loughborough or rather the old Loughborough, may be considered as entirely out of use. The number of traverse warp-machines are limited and on the decline; the number of straight-bolt machines are likewise on the decline; the number of pusher machines are very limited, but their number and value are kept up in consequence of a kind of lace called the Grecian net, being at this time rather fashionable, for the manufacture of which article this machine is particularly adapted. Nearly the whole therefore of the new machines now building, are either leaver machines to be worked by hand, or circular-bolt ones, to work by a rotary motion, adapted either for hand or power.

The lace manufactories of Derbyshire are in number about forty, and they employ eight hundred persons, besides giving employment to between

three and four thousand females, who figure or run the net when it is taken from the loom. Messrs. Boden and Morley, Mr. Johnson, Mr. Wigston and Mr. Ward, work their machines by steam-power. In Derby alone there are one hundred and fifty lace machines, in Chesterfield thirty, in Ilkeston forty, and a few at Duffield, Matlock, Melbourn, &c. and the quantity produced is so immense, that the depression of the business seems to be the necessary consequence of over-production. Four-fourths bobbinet was sold in 1809, by Messrs. Heathcote and Lacey (the original patentees) for five guineas per yard; and lace, of a superior quality, may now be purchased for 1*s.* 6*d.* per yard.

Lace Manufactories.

Quillings or narrow edgings of lace (which was first made from the traverse warp-machine) three inches broad, that sold in 1810 for 4*s.* 6*d.* per yard, is now selling for 1½*d.* and improved in quality.

Silk.* it has been noticed, was used as the principal material in hosiery soon after the invention of the stocking-frame, but it was not until the beginning of the eighteenth century that the manufacture of that elegant article by machinery upon an extensive scale was introduced into this country. The Italians had previously possessed the art of throwing silk by means of machinery, and the French excelled in the fabric of piece-goods. Attempts were made in England to rival these productions, but without success. A person named Crocket endeavoured to throw silk at Derby in the year 1702; but his machinery was imperfect, and it was not until 1715, that a young ingenious and enterprising mechanic, whose name was Lombe, resolved to proceed to Italy and investigate personally the whole process. He encountered many dangers, but returned to England in 1717, with plans and drawings, and accompanied by two Italian workmen. He came immediately to Derby, and rented of the corporation a long swampy island in the Derwent for eight pounds per annum, and there erected THE SILK MILL, which was long esteemed a masterpiece of mechanical skill. While the mill was building, Mr. Lombe erected temporary machines (turned by hand) in the town hall, and other places, by which he was enabled to pay for the erection of the grand machine, as the work went on. In 1718 he obtained a patent for a term of fourteen years; but the Italians were enraged at his success, and he fell a victim to their vengeance, in the year 1722; it being supposed that a slow poison, administered to him by an artful woman from that country, occasioned his death at the early age of twenty-nine. One of the Italians who had accompanied Mr. Lombe from Italy, and whose name was Gartrevalli, remained at Derby for some time, and afterwards worked at a silk mill which had been established at Stockport, where he died in poverty.

Silk.

Lombe's Silk Mill.

* It was not till the year 555 that two Greek monks, returning from the Indies to Constantinople, brought with them a number of silk-worms, with instructions for hatching their eggs, rearing and feeding the worms, drawing out the silk, &c.: upon which, manufactories were set up at Athens, Thebes and Corinth. In the 12th century, Roger King of Sicily, established a manufactory at Palermo and another in Calabria, having brought workmen from the cities of Greece, which he had conquered in his expedition to the Holy Land; and by degrees the rest of Italy as well as Spain, learned the art from the Sicilians and Calabrians. In the reign of Henry the Second, the French began to imitate their neighbours with good success; and James the First was very desirous of having mulberry trees planted and silk-worms propagated in his British dominions: where, from various experiments, it appears they will thrive and work as well as in any other part of Europe. Near Tiverton, Mr. Heathcote has planted about thirty acres with mulberry trees, and many millions of worms are now at work there.

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Lombe's Silk-Mill.

Mr. John Lombe was succeeded by his brother William, a young man of a melancholy disposition, who committed suicide. The property then became the inheritance of Mr. Thomas Lombe, the cousin of the enterprising founder of it, and was conducted with much spirit and success; for about the year 1730, the works are said to have employed more than three hundred persons. In 1732 the patent expired, and the proprietor petitioned parliament for its renewal, alleging "that the works had been so long a time in perfecting, and the people in teaching, that there had been none to acquire emolument from the patent." The application was not successful, but a remunerating grant of £14,000. was voted to him, and a model of the works was ordered to be deposited in the tower of London. The proprietor was also introduced at court, and had the honour of knighthood conferred upon him. He did not long enjoy this reward of wealth and honour. On the 3rd of January, 1739, he expired, leaving to his widow an accumulated property, valued at little less than £120,000. On the 20th of February, 1739, the lease of the silk mill was assigned from Lady Lombe to Richard Wilson, esq. and the whole of the works were in the following July transferred to that gentleman for the sum of £4000. These premises were occupied for many years by Mr. Swift, who made many important additions to the machinery. The lease expired in 1803; and the mill is now in the occupation of Mr. William Taylor; who has entirely renewed the works, with numerous important improvements. In the year 1826, a fire broke out in the upper part of the old mill and did considerable damage.

In this preparatory sketch, we cannot pretend to describe this extraordinary combination of mechanism, except in a very cursory manner. The length of the building is one hundred and ten feet; its breadth thirty-nine feet; and its height fifty-five feet and a half. It contains five stories, besides the under-works, and is lighted by four hundred and sixty-eight windows. The whole of the rooms are filled with machinery constructed on the most modern principle. This elaborate machine (for *one only* it is) though occupying five apartments, is put in motion by a single water-wheel, twenty-three feet in diameter. All operations are performed here, from winding the raw silk to organzining or preparing it for the weavers.

Silk Trade.

Besides this original mill at Derby for the throwing of silk, there are twelve others in that town, and in the other parts of the county, at Glossop, Chesterfield, &c. there are five or six. In this branch of the silk trade, between two and three thousand hands are employed, a great proportion of whom are children and young women. The wages differ with respect to age, sex and capacity from 2*s*. or 3*s*. per week to about 20*s*.—The names of the manufacturers, who attend chiefly to throwing silk, will be found by reference to the body of the Directory.

Weaving of Silk.

The weaving of piece-goods in silk was first introduced into Derby by Mr. William Taylor, at his factory in Bag-lane, about seven or eight years ago. His example was followed by Messrs. Bridgett and Son, and by Messrs. Ambrose Moore and Co. and now sarcenets, gros-de-naples and other rich silks are manufactured, in a style equal to those made by the weavers of Spitalfields. There are now about two hundred and twenty

looms in work. The number of hands employed in this branch is about three hundred. CHAP. 5.

Weaving of Silk.

Messrs. James and C. S. Peet introduced the weaving of narrow piece-goods into Derby in 1823: they erected a large factory and fitted it up with looms and machinery, constructed with great ingenuity by Mr. Isaac Peet; to which they applied steam-power for the weaving galloons, doubles, &c. The Messrs. Peet are also considerable manufacturers of silk hose. The other ribbon weavers are Messrs. Smith, Bosley and Smith at Glossop, and Messrs. Frost and Co. of Derby. The latter have recently erected a handsome mill on the banks of the Derwent. The hands now employed in this branch of manufacture amount to upwards of four hundred.

Cotton Manufacture.

The rapid rise of the cotton manufacture in this country is a subject of astonishment to other nations; and has been justly termed one of the greatest triumphs of enterprise aided by mechanical genius. Long after the middle of the last century, the cotton manufacture was in its infancy; it "NOW forms the principal support and bulwark of the country, affording an advantageous field for the accumulation and employment of millions upon millions of capital, and of thousands upon thousands of workmen."* The manufacture of cotton was probably introduced into England in the early part of the seventeenth century, but down to the comparatively late period of 1773, the weft only was cotton, and the manufacturers were dispersed in cottages throughout the country. They continued to labour under the disadvantage of importing linen-yarn for the warp or longitudinal threads of the fabric, while no additional supplies of cotton-yarn could be procured for weft, but by facilitating the processes of carding and spinning. The desired improvements originated with an illiterate, but most ingenious and inventive mechanic, named James Hargraves, a carpenter at Blackburn in Lancashire. He adapted the stock cards, used in the woollen manufacture, to the carding of cotton. The carding-machine soon succeeded Hargraves' invention; and was brought into use by Mr. Peel, the grandfather of the present eminent statesman, about the year 1762. Sir Richard Arkwright added some improvements to the carding-engine, but spinning by hand still continued to be an operation too tedious to fulfil the expectations of enterprising men, and in 1767, Hargraves constructed a machine called a spinning-jenny, which enabled a spinner to spin *eight* threads with the same facility that one had previously been spun; and the machine was subsequently brought to such perfection as to enable a little girl to work no fewer than from *eighty* to *one hundred and twenty* spindles. Hargraves thus opened the way to those splendid inventions and discoveries that have created and sustained a vast current of public and individual wealth beyond any thing recorded in the history of the world; but to himself, his inventions were productive of bankruptcy and ruin, and, to the indelible disgrace of his age and country, he was suffered to end his days, even after the merit of his inventions had been universally acknowledged, in the workhouse at Nottingham.

Hargraves' and Peel's Machines.

Arkwright's Spinning-Frame.

Still the *jenny* was applicable only to the spinning of cotton for weft,

* Edinburgh Review, for June, 1827. An excellent article upon the British cotton manufacture, to which we are indebted for much of the substance of our brief abstract, respecting this important branch of trade.

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Arkwright's Spinning-Frame.

being unable to give to the yarn that degree of firmness and hardness which is required in the longitudinal threads or warp. This deficiency was supplied by the invention of the *spinning frame*, constructed by Sir Richard Arkwright. That extraordinary individual was born at Preston in Lancashire, in 1732. He was the youngest of thirteen children and was bred to the trade of a barber. In very early life he turned his attention to mechanism; but he followed his original trade until he was thirty-five years of age, both at Bolton-le-Moors and at Wirksworth in this county. About that period he became an itinerant hair-dealer, and formed an acquaintance with a clock-maker at Warrington of the name of Kay, to whom he seems to have imparted his ideas, and in conjunction with whom he put together the first machine for spinning by means of rollers. It was some time before this ingenious man could procure the aid of capital. He applied in vain to a Mr. Atherton of Liverpool, but at length the celebrated Jedediah Strutt of Derby, who, by the invention of the Derby rib, was acquiring a fortune in the stocking manufacture, having seen Arkwright's inventions, entered into partnership with him. In 1769, the first mill, upon Arkwright's principle, was erected at Nottingham. This was driven by horses. A patent for spinning by rollers was obtained, and in 1771 a second factory, on a much larger scale, was built at Cromford in this county; the machinery of which was turned by a water-wheel. Additional discoveries and improvements were made, and a fresh patent for the whole was taken out in 1775. The success which attended this invention excited the emulation of the Lancashire manufacturers, and in 1772 they attempted to set the first patent aside, on the ground that Sir Richard Arkwright was not the original inventor. This allegation was unsupported by evidence, and the action at law terminated in a verdict which confirmed the validity of the patent.—In 1781, Sir Richard Arkwright's second patent, obtained in 1775 was attacked, and a verdict was obtained against him, not on the ground of any prior invention, but because he had not given a *sufficiently distinct description* of the machinery in the specification. On another trial in 1785, a verdict was given in favour of Sir Richard Arkwright; but a third action followed in June of the same year, in which the patent was contested on the ground of a prior invention, as well as that of imperfect specification. In support of the former, a reed-maker, of Bolton, named Highs or Hayes, was, for the first time, brought forward, who asserted that he had invented a machine for spinning by rollers previously to 1768, and that he had employed Kay, the watchmaker at Warrington, to make a model of the machine. Kay was brought forward to prove that he had communicated that model to Arkwright. A verdict was given against the patent, and the court, at the latter end of the same year, refused to grant a new trial. There is, however, great improbability in the story told by Highs and Kay; and it is difficult to suppose that if Highs was in reality the inventor, he would not have come forward on the first trial in 1772, but have remained sixteen years, a passive spectator of such astonishing success, accomplished by means of which he pretended to be the originator. The most intimate friends of Sir Richard Arkwright, and those best acquainted with his character, never entertained the slightest doubt with respect to the originality of the invention.

Cotton Manufactories.

On the first introduction of the machines, upon Sir Richard Arkwright's principle, the factories containing them were subjected to the reiterated attacks of the labouring classes; and what was still more extraordinary, the manufacturers themselves displayed the greatest animosity towards these inventions, and unanimously refused to purchase the yarn made by them. In 1774, when Messrs. Strutt and Needham had established a manufacture of calicoes, the manufacturers of Lancashire opposed, without success, the encouragement intended by the legislature on these "fabrics made of cotton lately introduced," which the act pronounced to be "a lawful and laudable manufacture."—Yet, notwithstanding an opposition, in which litigation and mob-violence were frequently allied, Sir Richard Arkwright acquired a princely fortune; and on presenting an address to his late Majesty, in the year 1786, when he served the office of sheriff for Derbyshire, the honour of knighthood was conferred upon him. He had never enjoyed good health, and on the third of August, in the year 1792, he closed his truly useful life at Cromford, in the sixtieth year of his age.

Crompton's Mule-jenny.

The *mule-jenny*, so called from its being a compound of the jenny and the spinning frame, was invented by Mr. Samuel Crompton of Bolton-le-Moors, in 1775. All sorts of wefts are now spun by this machine. The inventor of this machine perfected it gradually, and took out no patent to secure him a reward for his labour. In 1812, he applied to parliament for a remuneration, and it was shown that upwards of four millions of spindles on his principle were used in buildings and machinery, valued at from three to four millions sterling. Parliament voted him the very inadequate sum of £5,000.—In 1792, Mr. William Kelly of Glasgow, discovered a mode of working the *mule*, which had previously been a hand-machine, by mechanical power.

Cartwright's Power-Loom.

The power-loom, for the weaving of cotton, was the invention of the Rev. Mr. Cartwright, a clergyman of Kent, who took out a patent for his invention in 1787; and the progress of power-loom weaving was greatly aided by a beautiful machine for dressing the yarn used as warps, which is now called Ratcliffe's dressing machine, but was invented by Mr. Thomas Johnson of Bradbury.—There are now upwards of 50,000 power-looms in Great Britain. At the accession of the late king, in 1760, the entire value of all the cotton goods, manufactured in Great Britain, was estimated to amount to £200,000. a year, and the number of persons employed was quite inconsiderable. But after the invention of the jenny and the spinning frame, the quantity of cotton imported, the value of goods manufactured, and the number of persons employed, increased in a geometrical proportion. The imports from 1771 to 1775, amounted on an average to 4,764,589 *lbs.* and from that period to the dissolution of Sir Richard Arkwright's second patent in 1785, the annual average imports had increased to 7,470,845 *lbs.* In 1824, Mr. Huskisson stated to the House of Commons, that the total value of the cotton goods annually manufactured in Great Britain amounted to the prodigious sum of 31½ millions; and we shall certainly not exceed the truth, if we estimate their present value at 40 millions.

Cotton Trade.

Cotton Mills.

We shall not attempt to trace the cotton manufacture of Derbyshire, earlier than the erection of the mill at Cromford, by Sir Richard Arkwright,

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in 1771. There are now two mills at Cromford, a third at Masson, and a fourth at Bakewell, which was also built by Sir Richard Arkwright. In these are employed about one thousand persons, of which four-fifths are women and children. At Belper are the cotton mills of the Messrs. Strutt. There were formerly three mills upon the Derwent at this place, the first of which was erected by Mr. Jedediah Strutt, in the year 1776. Two of these are now standing, but the third was destroyed by fire in 1803. The principal of these mills is two hundred feet long, thirty feet wide and six stories high. At these mills about fifteen hundred persons are constantly employed. There are also three cotton mills at Millford, belonging to the same proprietors, where about five hundred persons are employed in the manufacture of cotton-thread. The Messrs. Evans employ between five and six hundred persons at Darley Abbey, near Derby. There are in the whole county at present about one hundred and twelve mills for the same manufacture, employing, in the whole, not less than twenty thousand persons.

The parish of Glossop, situated amidst the most mountainous tracks of the High Peak, has become, within little more than forty years, one of the most important seats of manufacture within Derbyshire. Of the hundred and twelve cotton mills existing at present in this county, there are fifty-six in Glossop parish, without reckoning five other similar mills, upon or beyond the boundary brooks. In the hamlets connected with this parish, an immense number of manufactures and rising trades of various descriptions are scattered. Calico-weaving is carried on in *eleven* of these hamlets, and calico-printing in *four*. In *seven* of these places, where in the year 1780 there were only a few hovels and here or there a farm-stead, there are now establishments for woollen cloth spinning, weaving and dressing; and throughout these hamlets, there are numerous factories for muslin, cambric, and fustian weaving; for bleaching and dyeing; for hat-making, paper-making and tanning; besides smithies, and iron-works of every description. In the last quarter of the last century there was but one mill in the whole of this district, and that was employed in grinding the scanty crop of oats into meal for the food of a few agricultural inhabitants.—The late Samuel Oldknow, esq. was one of the earliest manufacturing settlers in this vicinity. He found a powerful stream coursing its way through a deep dell, and instantly perceived the advantages to be derived from it. He established himself near Mellor; and his example and success in business soon procured him many neighbours, until the banks of the Goyte and the Etherow became the busy scenes of industrious, enterprising and ingenious men.

Weaving of Muslin.

The first mill built by Mr. Oldknow was upon the Arkwright principle, and he improved the fineness of the threads. Having accomplished this object in the spinning, he applied it to the weaving of British muslins, and constructed mills for that purpose, which he executed by the power-loom. Mr. Oldknow was ever active in public pursuits, and the Peak-Forest canal originated chiefly with him. Towards the close of his useful existence he occupied himself much in agricultural pursuits, and at his lamented death, which happened in September 1828, he left the valley of Glossop improved in its agricultural produce, as well as enriched by manufacture; and it

may be also said, that what he found a desert, he left, comparatively a city and a garden.—The principal manufacturers now resident in that district will be seen by reference to the Directory. Mr. J. Wood, and Messrs. J. and W. Sidebottom are considered as the most eminent power-loom manufacturers; which looms they employ in the fabric of calicoes and muslins. Calico printing is here carried on extensively: it is performed with cylindrical copper rollers, on which the figures are engraved. The process of this mode of printing is so rapid, that pieces of twenty-eight yards are thrown off from each set of rollers in less than two minutes. This art was greatly improved, if not invented, by Mr. John Potts, of the house of Potts, Oliver and Potts, of New Mills. This gentleman was an artist himself, and having studied the different shades of colour produced upon the blue-ware in the potteries, he was enabled to bring the art of calico-printing to a perfection of which previously it had not been supposed to be capable.

Muslin Weaving.

Calico Printing.

In a county which is rising so rapidly in manufacturing interest, the business of bleaching and that of dyeing become necessarily important. It appears indeed that Derbyshire was distinguished in very early times for its fullers and bleachers. There are bleaching-houses and grounds in about eighteen towns and villages. We have already mentioned those at Millford and Glossop. One of the most eminent in the county is that of Mr. John Garton, at Lumsdale near Matlock. Grass-bleaching is carried on by Messrs. Hewitt, Longson and Co. at New Brampton, and by Mr. Radford at Higham.

Bleaching and Dyeing.

Of the other branches of industry in which the inhabitants of Derbyshire are chiefly employed, we must not omit mention of tape, ferrets and small-wares. Manufactories of this nature were introduced in the town of Derby about a quarter of a century ago, by Riley, Madeley, Hackett and Co. and the manufacture of tape is now carried on by different firms, which have all originated in the Haarlem works, in Derby. There are nine mills in the county, at which about nine hundred persons are employed.

Tape, &c.

The clock and watch manufactories of Derby employ about sixty persons. Messrs. Whitehurst and Son, who conduct an extensive business in this line, are descendants of the celebrated geologist, natural philosopher and able mechanist, Mr. John Whitehurst, F.R.S. That eminent man settled at Derby about the year 1740, where he made the clock and chimes of All Saints church and the clock of the town hall; on which account the corporation presented to him the freedom of the borough. He was subsequently appointed inspector of weights and measures in London, where he died in February, 1788, in his seventy-fifth year. The present Messrs. Whitehurst have made clocks for many of the halls belonging to the nobility and gentry of this and other counties, which are remarkable for their accuracy. They have also made a clock with chimes for Burton old church, and clocks for many churches in this and other counties which are universally admired. The watches of Messrs. Brookhouse, Mr. Tunnicliffe, Messrs. Bancroft and Woodward and other manufacturers are highly esteemed, and have become articles of extensive exportation.

Clocks and Watches.

Among the remaining manufactures, which are too numerous to particularize, it will suffice to name the paper-mills, the principal of which are at Darley Abbey, Chapel-en-le-Frith, Little Eaton and Matlock.

General Manufactures.

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These employ upwards of three hundred persons. At the manufactory of Mr. John Ibbotson, of White-hough mills near Chapel-en-le-Frith, there is made the largest sized paper in England. The London press, which has within these two or three years past, issued newspapers of very great dimensions, is supplied from this manufactory; and here, a sheet of paper has recently been made of such extraordinary extent, that it would cover nearly an acre of land. Manchester and other great towns are furnished with large packing paper from this mill. At Messrs. Tempest and Sons, Little Eaton near Derby, large sized machine-paper is also made. Printing has been carried on in all its branches in Derby, Chesterfield, &c. for many years past; and at Derby, Messrs. Mozley and Son, have long been established as wholesale booksellers and printers, and at the present time employ sixty-seven hands. Mr. Richardson is also a wholesale bookseller and printer, and is carrying on a considerable business. There are also colour-mills, plaster of Paris mills, and mills for Roman cement. Hat-making is carried on at Lea-wood, at which place the government has, during many years, contracted for soldiers' military caps, helmets, &c. Mr. Walker is the proprietor of this establishment. Fine hats are also made at the same manufactory. Hat-making is also an extensive business at Chesterfield, Matlock, Wirksworth, Alfreton, &c.—Tanners, fellmongers and leather-dressers are established in the principal towns.

Trade of the County.

Thus it will be seen that Derbyshire is entitled to take an elevated rank in the trade, wealth and industry of the kingdom. Some writers have placed it as the fourth amongst the counties of England with respect to manufactures; and we may venture to assert, that its character is rising in national estimation. In agriculture it is upon an equality at least with the most favoured districts; and its cheeses in particular are sought for in other counties.

Exports and Imports.

The chief articles exported for sale beyond the limits of the county, appear to be cotton-twist and stockings, silk-thread, piece-goods and stockings, calicoes and muslins, frame-lace, hats: coals, iron, edge-tools and implements, nails, lead, red and white lead, building-stone and marble, lime, gypsum, calamine, chert, fluor spar, copperas, grind and mill-stones, fire-clay, bricks, stones, china, earthenware, jewellery; and, among other articles of agricultural produce, wool and cheese.—In aid of its transit trade or commerce, Derbyshire possesses the *Trent*, and the *Trent* and *Mersey* navigation; the Peak Forest, Cromford, Erewash, Nutbrook, Ashby, Chesterfield and Derby canals. There is now in progress the High Peak railway, which will extend from Cromford to Whaley Bridge on the Goyte, where it will meet the Peak Forest canal, the Pinxton, Denby and many private rail-ways.—The *import* trade of the county may be considered as consisting chiefly of the raw material for its cotton and silk factories, of groceries and wines, and of other articles of foreign growth, with a few manufactured goods of the peculiar produce of other counties.

Ancient Trade.

A district like Derbyshire, abounding in the useful ores of lead and iron, with other natural productions, would necessarily have had some intercourse of trade in very early times. It would be absurd to endeavour to trace any certain vestiges of such commerce, any further than to point out the probability that the mines of Derbyshire were known to the traders of Belgium previously to the Roman invasion, while the pigs of lead, im-

pressed with latin inscriptions, which have been discovered in the mining districts, sufficiently prove that this species of wealth had become an object of attention to the Roman government. The conveyance of heavy articles must have been attended with considerable difficulty, but it appears plainly by Doomsday Book that the Trent had been navigated long before the Conquest, and it may be inferred that water carriage was not wholly unknown in the remotest periods.

Ancient Trade.

There can be no doubt that those who wrought the mines obtained their sustenance from the southern districts of the county, and hence would originate a trade in corn and other provisions. This intercourse continued many centuries, and Camden describes the town of Derby in his time, as dependent for its prosperity upon dealers who purchased corn, which they sold again to the more northern people; but the earliest roads were probably made and used rather for military than trading purposes. We shall have occasion to speak more at large in our Chapter on the Antiquities of the County, concerning the Roman roads and encampments, of which Derbyshire possesses many remarkable and interesting traces; it will be sufficient to observe, that these ancient roads proceeded in direct lines from one station to another, and were carried over hills, deviating in very few instances from their course for the sake of avoiding steep ascents. Very few carriages were then in use, and all intercourse, including the conveyance of goods, was performed either on foot or horseback.

Roads.

In after times, this adherence to the straight line of roads, for any considerable length, began to be less regarded; and the leading object was dry and sound ground between town and town. When in times still more modern, wheel carriages came into general use, roads began to claim the attention of the public; turnpike-rates for their repair were established, and the management of particular roads was placed, by special Acts of Parliament, under the direction and controul of trustees.

Turnpike Roads.

The first turnpike Act, that had reference to Derbyshire, was for repairing and improving the road from the bridge over the Trent at Shardlow, through Derby to Brassington, situated on the southern slope of the Peak limestone hills. The reason alleged for this first Derbyshire turnpike road terminating at so small and obscure a town as Brassington, was, that the traveller towards the north, having, by means of this improved road, been helped over the low and deep lands of the county, might proceed over the rocky districts, to Buxton, Tideswell, Castleton, &c. without further assistance. From the faulty construction of some parts of this road, which is known at Derby by the name of the Kedleston road, it is now little frequented by general travellers, but is still an important line of communication for some small towns and villages. Improved roads have within the present century become very numerous; among others, we may mention the following mail roads. The London road, which crosses the Trent out of Leicestershire at Cavendish Bridge, and proceeding through Derby and Ashbourn, leaves this county at Hanging-bridge. The Birmingham and Sheffield mail road enters Derbyshire at Monk's Bridge, near Burton, across the Dove, and proceeds through Derby, Ripley, Alfreton, Chesterfield and Dronfield, and passes into Yorkshire, over the Sheaf at Healy near Sheffield. The Sheffield and Manchester mail road, enters Derbyshire at

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Ringing Low, and passing through the Woodlands and the populous district of Glossop Dale, proceeds into Cheshire. Another Sheffield and Manchester mail road crosses the eastern moors and runs through Bakewell, Buxton, &c. The London and Sheffield mail, through Nottingham, enters Derbyshire at Pleasley, and runs through Chesterfield and Dronfield. The roads for the by-mails, or gig and horse mails, are in various directions: one between Derby and Nottingham, one between Derby and Bakewell, which meets the Sheffield mail coach, and another horse-mail proceeds forward to Stoney Middleton; and several others. There is also a new line of road from Cavendish Bridge to Whaley Bridge, through Derby, Belper, Cromford, Matlock Bath, Bakewell, Buxton, &c. At Ashford a branch from this road runs through Tideswell, Peak Forest, to Chapel-en-le-Frith, Castleton, &c. and it is now under consideration to carry a new line of road from Ashford in the Water to Chapel-en-le-Frith, so as to avoid the mountainous ridges of Peak Forest. The plan and survey of this new line have been made by Mr. Matthew Frost, from whose report we learn that an hour and a half will be saved by this line in the conveyance of letters, &c. by the mail between London and Manchester.—

Branch and Private Roads.

The branch roads that intersect the county in every direction, are too numerous for us to particularise: many are in excellent repair, while others have been neglected in consequence of new and more advantageous lines of road having been constructed. The private roads over noblemen's and gentlemen's estates are generally excellent, from the abundance of materials and the great attention paid to them; while the agricultural lanes possess, in many parts of the county, much rural utility and beauty.

In reply to the regret often expressed, that the first turnpike roads were very erroneously laid down, and after being made at a great sacrifice of expense, are now generally neglected; it has been judiciously observed, that if the first turnpike roads had been conducted through the valleys as at present, the hilly, rocky and often barren districts, over which the first road-makers contrived so absurdly to mount, would have remained yet, and perhaps for long periods to come, without practicable carriage roads, which are so essential to their agricultural improvement, and which these roads, imperfect as they are, have, in many districts, very beneficially supplied. We cannot quit the subject of roads without noticing the bridges, ferries and fords, which may be considered as connected with them.

Bridges.

The bridges over the Derbyshire rivers are generally well constructed, and several of them are built of stone, in a modern and elegant style. Over the TRENT there is the *Burton bridge*, an ancient structure of thirty-six arches. *Swarkstone bridge* is very ancient: it consists of twenty-seven arches, and is nearly one mile in length: this bridge was partly rebuilt and enlarged about the close of the last century. *Cavendish bridge* is an elegant stone edifice, consisting of five arches: it crosses the Trent on the London road, just beyond Shardlow, and unites the two counties of Derbyshire and Leicestershire, both of which contribute to the expenses of its repairs. *Harrington bridge*, which crosses the Trent at Sawley, is also a handsome erection, with five arches.—Over the DERWENT there is a private wooden bridge at *Wilne mills*, near the junction of that river with the Trent, where horse and foot passengers pay toll. At *Burrowash mills*

there is also a wooden bridge. At Derby there are three bridges over the Derwent: *St. Mary's bridge* is a very fine edifice, and is built in imitation of the celebrated bridge at Versailles over the Seine. It was erected in the year 1788, by public subscription. *Exeter bridge* is a small bridge of wood; and below it, there is a *long wooden bridge*, chiefly for the use of the canal towing-horses, and foot passengers.—*Darley-Abbey bridge*, erected by Messrs. Evans, is private property, and passengers pay toll for the accommodation afforded by it.—*Duffield bridge* is of stone, with five arches, and was widened in 1803.—*Milford bridge* was built in the year 1790, and is the property of Messrs. Strutt: it is a handsome, solid structure, remarkable for its neatness: a toll is taken of foot-passengers, as well as carriages, horses, &c. There is also at Milford an elegant *chain bridge*, for the accommodation of the work-people of the mill: it was designed by A. R. Strutt, esq. and built under his direction.—*Belper bridge* is a handsome stone edifice, of three arches, built at the expense of the county in the year 1795; the old bridge, which from the arms placed over the centre was thought to have been built by John of Gaunt, having been shortly before washed down by an extraordinary flood.—*Toad-Moor bridge*, the property of Francis Hurt, esq. is a neat stone bridge, at which foot and other passengers pay a toll: it was built in 1792. *Watstandwell bridge*, with seven arches, rebuilt in 1795, on the site of an ancient bridge, which was said to have been erected in early times by Walter Standwell, an Abbot of Darley.—*Cromford bridge* is a good stone bridge of three arches. There are other bridges, of stone, at Matlock, Darley, Great Rowsley, Chatsworth park (where there are two) Baslow, Calver (two) Stoke, Grindleford, Hazleford, Malham, Yorkshire bridge, near Bamford, &c. Over the Dove, the public bridges are *Monk's bridge*, connecting Staffordshire with this county; Tutbury, Sudbury, Doveridge, Norbury, Hanging bridge, Mappleton, Cow-wall, &c. which are all repaired at the joint expense of the two counties, to the intercourse of which they are subservient.—Over the Wye, there is a handsome bridge, of five arches, at *Bakewell: Holme bridge* is a similar structure. At *Ashford-in-the-Water*, there are two neat bridges over this beautiful stream. In *Taddington Vale* there is a stone bridge, and another at *Buxton*.—Over the Goyte, at Mellor Mills, there is a very handsome bridge, of one arch, erected by the late Mr. S. Oldknow, the span of which is fifty-four feet. *Marple bridge*, *Windy-bottom bridge*, near Mellor, *Hagney-fold* (two bridges) near New Mills, are of stone.—Over the Etherow, there is a bridge at Copstall near Ludworth, at Broadbottom there is another of sixty-three feet span, and at Hague near Gamsley, &c. —Over the Rother, there are stone bridges, at Beighton, Killamarsh, Renishaw, &c. Over the Markeaton or Morledge brook, there are not less than six stone bridges in the town of Derby, and over the same stream there is a very handsome stone bridge in Kedleston Park. The smaller rivers and brooks are crossed by bridges too numerous to particularize: some of which, erected in the parks or other domains of the nobility and gentry, are of very elegant construction, especially that in Calke park, of one magnificent arch, which spans one hundred and nineteen feet.

The following is as correct a list as can be obtained of the County Bridges; those marked (||) have been erected since the year 1729.—The

CHAP. 5. others were acknowledged to be COUNTY BRIDGES by the Clerk of the Peace, *Joseph Haynes, esq.* in the same year, as appears from a list in the possession of the Publisher with the signature of Mr. Haynes.

County Bridges.

Bridges.	*Over what River.*	*Hundred.*	*Remarks.*
‖Alfreton		Scarsdale	
Ashbourn School-house		Wirksworth	Half Staffordshire
——— Back lane		Wirksworth	Half Staffordshire
Ashford (two)	Wye	High Peak	
Ashover	Amber	Scarsdale	
‖Bailey brook bridge	Bailey brook	Morleston and Litch.	
Bakewell	Wye	High Peak	
Baslow	Derwent	High Peak	
Beighton	Rother	Scarsdale	
———	Rother	Scarsdale	Half Yorkshire
Belper	Derwent	Appletree	
‖Bentley bridge in Matlock	Lumsdale brook	Wirksworth	
‖Birching Lee	Derwent	High Peak	
Broadbottom	Etherow	High Peak	
*Burton bridge	Trent	Repton and Gresley	Half Staffordshire
‖Buxton	Wye	High Peak	
Calver (two)	Derwent	High Peak	
‖Carnfield in South Normanton		Scarsdale	
†Cavendish bridge	Trent	Morleston and Litch.	Half Leicestershire
‖Chilbage	Lady-Bower brook	High Peak	
‖Church bridge, in South Winfield	Amber	Scarsdale	
Coldwall		Repton and Gresley	
Compton		Wirksworth	
Comstowe			
Constrewe	Etherow	High Peak	
Copstall	Etherow	High Peak	
Cowwall	Dove	Appletree	
‖Cromford	Derwent	Wirksworth	
Crowdycote			
Dale, in South Winfield	Amber	Scarsdale	
Darley	Derwent	Wirksw. and High Peak	
Darwent	Derwent	High Peak	
‖Doelee	Doelee	Scarsdale	
Doveridge	Dove	Appletree	
‖Duffield	Derwent	Appletree	
‖——— Town bridge	Ecclesbourne	Appletree	
Edensor	Derwent	High Peak	
‖Fenney Bentley		Wirksworth	
Froggatt	Derwent	High Peak	
Glutton		Wirksworth	Half Staffordshire
Grindleford	Derwent	High Peak	
Hague	Etherow	High Peak	
Hanging bridge	Dove	Wirksworth	Half Staffordshire
†Harrington bridge	Trent	Morleston and Litch.	Half Leicestershire
Hartington	Dove	Wirksworth	Half Staffordshire
Hayfield		High Peak	
Hazleford	Derwent	High Peak	
‖Hognaston		Wirksworth	
Holme	Wye	High Peak	
Hope	Noe	High Peak	
Ilkeston	Erewash	Morleston and Litch.	Half Nottinghamshire
Killamarsh	Rother	Scarsdale	
‖King's Newton		Repton and Gresley	
‖Lady-Bower bridge	Lady-Bower brook	High Peak	
‖Langley Mill bridge	Erewash	Morleston and Litch.	
‖Little Monk's bridges	Dove	Morleston and Litch.	
‖Malham	Derwent	High Peak	
Mappleton	Dove	Wirksworth	
Marple	Goyte	High Peak	
Matlock	Derwent	Wirksworth	
‖Milford	Derwent	Appletree	Private
Mitham	Derwent	High Peak	
Monk's bridge	Dove	Repton and Gresley	Half Staffordshire
‖Morton		Scarsdale	
Nether Hall			
New bridge	Wye	High Peak	
‖Norbury	Dove	Appletree	
North bridge at Staveley	Dolee or Rother	Scarsdale	
‖Okeover	Dove	Wirksworth	Half Staffordshire
‖Packsaddle bridge	Markeaton brook	Morleston and Litch.	

* Burton bridge is repaired by the Marquess of Anglesea.

† Cavendish bridge and Harrington bridge are not repaired at the expense of the adjoining counties, as they are the property of private Companies.

Bridges.	*Over what River.*	*Hundred.*	*Remarks.*
‖Park Mill bridge		Scarsdale	
‖Pye bridge		Scarsdale	Half Nottinghamshire
Renishaw	Rother	Scarsdale	
Rowlee	Ashop	High Peak	
Rowsley	Derwent	High Peak	
Sandiacre	Erewash	Morleston and Litch. Wirksworth	Half Nottinghamshire
‖Sandy-brook		Appletree	
‖Shottle bridge	Ecclesbourne	Appletree	
‖Slitting Mill bridge	Rother	Scarsdale	
‖South Winfield Mill bridge	Amber	Scarsdale	
Stanton-by-Dale	Erewash	Morleston and Litch.	Half Nottinghamshire
St. Mary's bridge	Derwent	Morleston and Litch.	Rep. by the Borough
Stoke	Derwent	High Peak	
Stony bridge	Lathkil	Scarsdale	
‖Stretton Smithy Moor bridge		Scarsdale	
‖Sudbury	Dove	Appletree	
Swarkstone	Trent	Repton and Gresley	
‖Taddington Vale	Wye	High Peak	
‖Temple Normanton Munster bridge		Scarsdale	
‖Thorpe bridge, Shirland		Scarsdale	
‖Toadhole Furnace, Shirland		Scarsdale	
Trowell	Erewash	Morleston and Litch.	Half Nottinghamshire
‖Tupton Hagg bridge	Hipper	Scarsdale	
‖Turnditch bridge	Ecclesbourne	Appletree	
Tutbury	Dove	Appletree	Half Staffordshire
Watstandwell	Derwent	Morleston and Applet.	
Whaley	Goyte	High Peak	
Windy Bottom		Scarsdale	
‖Woolley bridge, in North Winfield		Scarsdale	
Wormhill or Miller's Dale	Wye	High Peak	
Yorkshire bridge	Derwent	High Peak	

County Bridges.

The principal *ferries* in Derbyshire are on the Trent and Derwent. Those on the former, are at Walton, Stapenhill, Willington, Twyford, Weston Cliff, King's Mills, &c. On the Derwent there is a ferry-boat between Matlock Bath and the village. At the Trent ferries, a strong chain or rope is stretched across the river by a block of pulleys, which prevents the boat from being borne down the stream, and assists the ferryman in towing it over the water. The toll for foot passengers is 1*d.*; for a horse 2*d.*; for a gig 1*s.*; for a one-horse-cart 6*d.*; for a cart and horses 1*s.*; and for a four-wheeled coach or wagon 2*s.* 6*d.*—There are *fords* across the Trent, at Walton, Barrow, Willington and Weston; across the Trent and Dove, at Newton Solney; across the Dove, at Marston, Sudbury, Doveridge and Rocester; across the Derwent, at Wilne Mills, Ambaston, Alvaston and Little Eaton. These fords are much neglected, and are considered to be very dangerous at times of high floods. They are seldom used except by persons in their immediate neighbourhood. About three years ago, a valuable team of horses, belonging to Mr. Fletcher of Cavendish bridge brewery, was lost in crossing Ambaston ford; and many lives have at different periods been sacrificed, through the want of gauges being fixed on each side the river to point out the depths of the stream.

Ferries.

Fords.

The *Cromford and High Peak rail-way* commences at the Cromford canal, about one mile below that place; the hill to the westward of the canal is ascended by two inclined planes, gaining together an elevation of four hundred and sixty-five feet; at each of which there will be two engines of twenty horses' power each, that will draw the wagons up at the rate of four miles per hour. From the head of the upper inclined plane, the rail-

Cromford and High Peak Railway.

CHAP. 5. High Peak Rail-way.

way passes by the Steeple House, near Wirksworth, and from thence to Middleton Moor, by an inclined plane which rises two hundred and fifty-three feet; and on Hopton rabbit warren is another inclined plane, making together an elevation of eight hundred and ten feet above the canal. The deep cutting on Hopton Moor is scarcely equalled by any thing of the kind in the kingdom, being nearly seventy feet in depth, and principally through limestone. From the top of the Hopton inclined plane, the rail-way proceeds in a north-westwardly direction, leaving the village of Brassington three quarters of a mile to the south-west, passing by Miningloww to near Newhaven, and pursuing the same direction, crosses the Ashbourn and Buxton road near Haven Lodge. From the Hopton inclined plane, the rail-way is level to Hurdlow, a distance of about twelve miles: at which place there is an inclined plane, making the summit of the rail-way nearly one thousand feet above the level of the canal. From Hurdlow the course of the rail-way runs nearly parallel with the turnpike road to Brierlow; from thence skirting the hills past Harper Hill lime works, and along the foot of Axe-Edge to Burbage, leaving Buxton about one mile to the eastward; at Burbage Edge is a tunnel five hundred and eighty yards long, and about one mile and a half north of it, the rail-way descends into the valley of the river Goyte, by two inclined planes, falling four hundred and fifty-seven feet; and running level from thence, it crosses the Manchester road at Fernylee to the head of the next inclined plane (near Shallcross Hall) which falls two hundred and forty feet.

The line crosses the Sheffield road at Horridge End, and runs to the Peak Forest canal at Whaley, at which place there is an inclined plane falling forty feet. The distance between the two canals, by the line of rail-way, is nearly thirty-three miles. The Act was obtained about six years ago, and the estimated cost is £165,000. The advantages to the district through which it runs will be very great, as it will be supplied with coal at a much lower rate than it can now be procured; and lime, which is essentially useful to the agriculturist, will be rendered much cheaper.

A rail-way is projected to unite the Cromford and High Peak with the Manchester and Liverpool rail-way: and should it be carried into effect, it will produce a considerable traffic in different descriptions of merchandise, such as cotton, groceries, &c. which now go by a circuitous route from Liverpool into the counties of Derby, Nottingham, &c. will find a direct conveyance by the new junction rail-way and along the Cromford and High Peak.

With respect to the High Peak rail-way, which is also connected with this canal, it appeared from a report of the Committee, which was laid before the proprietors at their annual meeting, on June 11, 1829, at Buxton, that nearly the whole line of rail-way was then prepared for laying down the iron rails, and that several miles of the rail-way was actually completed. It was then expected that the great deep-cutting and tunnel through the rock at Hopton, and the large embankment, would be accomplished by the following September. Of the tunnel at Buxton, four hundred and sixty yards were then completed, and the report contemplated the opening of the whole line of rail-way for general traffic in the course of the ensuing spring.

Some of the first rail-ways laid in Derbyshire were of wood; and in the

construction of these, the flanch or projecting rib for keeping the wagon on the rail-way, was on the wheel, but now, the flanches of iron rail-ways are generally cast on the bar. The earliest use of flanched iron rails above ground (for they had been previously introduced in the underground gates of mines) is stated to have been at the Wingerworth ironstone pits, by Mr. Joseph Butler, about the year 1788. Inclined planes for rail-way wagons were probably first used on the east side of Chapel-en-le-Frith, in connexion with the Peak Forest canal.—In a great many of the coal pits, enumerated at page 53, iron rail-ways are laid along the counter-head or working-gate, for conveying the trams or corves of coal to the bottom of the drawing shaft. The Thatch-Marsh collieries, near Hartington, are worked by a rail-way tunnel, driven at the expense of the Duke of Devonshire, for the better supplying of Buxton with coals. There are several private rail-ways in the county, connected with the collieries, ironstone pits, &c.

Early Rail-ways.

> "Your virgin trains on Brindley's cradle smiled,
> And nurs'd with fairy-love the unletter'd child,
> Spread round his pillow all your sacred spells,
> Pierced all your springs, and open'd all your wells.—
> As now on grass, with glossy folds reveal'd,
> Glides the bright serpent, now in flowers conceal'd;
> Far shine the scales, that gild his sinuous back,
> And lucid undulations mark his track;
> So with strong arm immortal Brindley leads
> His long canals, and parts the velvet meads;
> Winding in lucid lines the watery mass,
> Mines the firm rock, or loads the deep morass,
> With rising locks a thousand hills alarms,
> Flings o'er a thousand streams its silver arms,
> Feeds the long vale, the nodding woodland laves,
> And plenty, arts, and commerce freight the waves.
> —Nymphs! who erewhile round Brindley's earlier bier
> On snow-white bosoms shower'd the incessant tear,
> Adorn his tomb! oh, raise the marble bust,
> Proclaim his honours, and protect his dust!
> With urns inverted round the sacred shrine
> Their osier wreaths let weeping naiads twine;
> While on the top mechanic genius stands,
> Counts the fleet waves, and balances the lands."

The commercial communications throughout the county have been greatly facilitated by the canals, which were commenced about the year 1770. The first of these was planned by the celebrated Brindley, in order to effect a union between the rivers Trent and Mersey, and thus to open a communication between the east and western coasts of England, and with London. This canal is frequently called the *Grand-Trunk canal.** Its general line of direction is nearly south-east, with a bending course to the south, through the counties of Chester, Stafford and Derby. Its principal objects are the export of coals, limestone, freestone, gypsum, lead, pig and bar-iron, pottery wares and other manufactured articles, cheese, corn, and other agricultural products; and for the import of numerous foreign and other goods: thus, forming a grand inland communication (the first effected) between the ports of Liverpool, Hull, Bristol and London.—This canal commences in the Bridgewater canal at Preston-Brook in Lancashire, and terminates

Canals.

Grand-Trunk Canal.

* Acts of Parliament, for the construction and regulation of this canal, were passed in the 6th, 10th, 15th, 16th, 23rd, 25th, two in 37th, 42nd and 48th of George III.

CHAP. 5. Canals.

in the lower Trent navigation at Wilden Ferry in this county. Near Swarkstone, it connects with, and is crossed by, the Derby canal. For sixteen miles, at its south-eastern end, between Wilden ferry and Burton bridge, this canal runs parallel to what was formerly the upper Trent navigation, but in 1805, the interest in that navigation was purchased of the Earl of Uxbridge by the Grand-Trunk Canal Company. The width of this canal, from Preston Brook at its north-western extremity to Middlewich wharf, and from Wilden ferry, at its south-eastern extremity, to Horninglow wharf, is thirty-one feet at top, eighteen feet at bottom, and five feet and a half deep; the locks, there, being fourteen feet wide, and adapted for river-barges of forty tons burthen: but the middle parts of this canal, and its branches, are only twenty-nine feet wide at top, sixteen feet at bottom, and four feet and a half deep, and the locks are seventy-five feet long and seven feet wide, adapted for boats, carrying from twenty to twenty-five tons burthen. Boats are built at Derby and Shardlow. At Monk's bridge, between Derbyshire and Staffordshire, this canal is carried across the flat meadows of the Dove valley, on an embankment thirteen feet high, for a mile and two furlongs, with aqueduct bridges containing twenty-three arches, from fifteen feet to twelve feet span, twelve of which arches are over the main branch of the Dove. There are numerous smaller aqueducts and culverts along the main line of this canal and its branches. The whole length of the Grand-Trunk canal, reckoning through the Wolverhampton branch, is one hundred and thirty-nine miles and a half, with a fall of one thousand and sixty-eight feet; but the main branch, called the Trent and Mersey canal, is ninety-three miles, with a fall of six hundred and forty-two feet.*—Mr. James Brindley, Mr. Hugh Henshall, Mr. John Smeaton, Mr. John Rennie, Mr. ——— Potter and other engineers, were employed or consulted on the works of this canal or its branches. These works were begun in July, 1766: in April, 1773, the line eastward of the Harecastle tunnel was completed; and in May, 1777, the whole line, and the branch to Caldon Low was completed and opened. The Leek and the Colridge branches were undertaken since 1797: the Lane End, Handley Green and Burslem rail-way branches, were projected in 1802. In 1807 the Uttoxeter branch was undertaken, and extended from Frog-hall to Oak-moor in August, 1808; to Alverton, in May, 1809; and to Uttoxeter, September 3, 1811.—The tonnage allowed to be taken is $1\frac{1}{2}d.$ per ton, per mile, with reasonable wharfage after twenty-four hours, on all kinds of goods; but paving-stones, and road-materials (limestones excepted) and marl and other manures may pass toll-free on the pounds and through the locks, when water runs waste thereat.—The usual price of freight has been mentioned at $1d.$ per ton, per mile. Until about the year

* From the Bridgewater canal to Middlewich, eighteen miles is level; thence to Talk, eleven miles, there is a rise of three hundred and twenty-six feet, by thirty-five locks; thence along the summit pound of the line (said to be four hundred and twenty feet above the Thames at Brentford) through Harecastle tunnel (which is a mile in length) to the Caldon-branch at Etruria, six miles, is level; thence to the Staffordshire and Worcestershire canal, seventeen miles, there is a fall of one hundred and fifty feet, by nineteen locks; thence to the Coventry canal, thirteen miles, is a fall of about thirty-two feet, by four locks; thence to Horninglow wharf, twelve miles, is about eighty-six feet fall, by eleven locks; thence to the Derby canal, ten miles, is about eight feet fall, by one lock at Stenson; and thence to the lower Trent navigation, six miles, is about forty feet fall, by five locks.

1785, men were employed in large gangs, to drag the boats on this canal and on the Trent river near it, but horses are now universally used for towing. The Act, 33rd Geo. III. for the Derby canal, granted to the Grand-Trunk Canal Company, certain rates on goods crossing this canal or passing out of it into the Trent navigation, by the detached parts of the Derby canal.—The Company have been authorized, by their different Acts, to raise £334,250. The shares were originally £200. each, but the 42nd Geo. III. empowered the Company to increase the number of shares at £100. At Shardlow, Willington, Horninglow, &c. there are warehouses for the accommodation of the trade, and numerous public wharfs.—The number of road and foot bridges over this canal is two hundred and fifty-eight. The tunnels belonging to this line of canal were the first enterprises of this nature in England. The Harecastle tunnel is two thousand eight hundred and eighty-eight yards long, through coal-measures, at seventy yards beneath the ridge. It is arched twelve feet high and nine feet wide. In its course, it intersects several valuable seams of coals, some of which are worked by means of small branch tunnels. The cost of driving this tunnel was £3. 10*s*. 8*d*. per yard run, in the year 1776; and being the first public canal tunnel constructed in Britain, it attracted for several years more attention than it now deserves.—There are other tunnels on the line of this canal in other counties; and there are rail-ways, connecting the neighbouring collieries with this canal in various parts of its line.

Chesterfield Canal.

The *Chesterfield canal* was projected by Brindley, and a survey of the country through which it was to be carried was made by that eminent engineer about the year 1769. In 1770 an Act of Parliament was obtained, authorising the Company to raise £100,000. in shares of £100. each. The canal was completed in 1777, and on June the 4th, in that year, the first vessel was brought to the town of Chesterfield. The Act obtained by this Company also warranted their borrowing £50,000. at £5. per cent. interest on mortgage of the tolls, or to raise that sum by new shares, at the discretion of the committee. By reports made to the Company by their committee, it appears that £2482. 3*s*. 6*d*. is annually paid out of the tolls, being the amount of interest at £5. per cent. on the sum of £49,643. 10*s*.; and from the same documents we learn that there are nine hundred and eighty-six share-holders, who obtain a profit upon the original £100. subscribed, of from £6. to £8. per cent. The expense of cutting the canal, with the charges for the survey and the Act of Parliament included, amounted to £160,000.—The general direction of this canal from Chesterfield is nearly north-west, by a crooked course about forty-five miles in length, in the counties of Nottingham, York and Derby.* It commences in the Trent

* From the tide-way in the Trent to Drake-hole wharf, about six miles, three furlongs, there is a rise of twenty-seven feet and a quarter; thence to East Retford wharf, eight miles and a quarter, there is a rise of seven feet; thence to Babworth, two miles and five furlongs, a rise of thirty-one feet and three quarters; thence to Worksop, seven miles and a quarter, a rise of twenty-eight feet; thence to Peck-mill, five miles and a quarter, a rise of one hundred and fifty-six feet to the summit, level two hundred and fifty feet above the Trent. From Peck-mill to the east end of the tunnel, half a mile, the course is level with the tunnel, which extends two miles to Norwood; thence to Gander-lane, half a mile, is a fall of one hundred feet; thence to Norbrigs branch, six miles and a quarter, level; thence to Hollingwood common, two miles, level; thence to Wilden's mill, two miles, a rise of twenty-nine feet; thence to the basin, at the north-east of Chesterfield, one mile and five furlongs, is a rise of eleven feet, by one lock, the canal in this last distance having crossed the Rother.

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near its junction with the Idle, at West Stockwith, about three miles and a half from Gainsborough, and terminates at the town of Chesterfield. The western part is considerably elevated above the sea, and crosses the East Rother ridge of hills by an extensive tunnel. The objects of this canal are chiefly the export of coals, lead, cast-iron, limestone, freestone, pottery wares; and the returns are foreign timber, grain, bar-iron, &c. The first part of this canal, from the Trent to East Retford, is constructed for large boats of fifty or sixty tons burthen, and above this, the width is twenty-six or twenty-eight feet, and the depth from four to five feet only. In the chain of locks between Shire Oaks and Sand-hill close, there are eighteen (numbered from 38 to 21) which from their proximity have been named the giant's staircase; and at the west end of the tunnel there are four locks, formed by only five gates, and below these there are six locks united together.—The Hollingwood Common tunnel is a mile and three quarters long. It is not connected with the level of the canal, but kept one foot lower, by means of a culvert under the canal. The whole of its length, except the first three hundred yards, is driven in the "Deep End or Squire's" coal seam, where it is of service for draining the works. The southern end of the tunnel is about eighty yards beneath the surface: it is six feet high and five feet and three quarters wide. The depth of water within it is two feet, on which boats are used twenty-one feet long and three feet and a half wide, holding seven corves, which weigh together about 20 cwt. When these tunnel-boats arrive at the side of the canal, a crane is used to hoist up the corves and empty their contents into a canal boat. This curious colliery belongs to the Duke of Devonshire, and is worked under the direction of his Grace's colliery agent. Near the middle of the tunnel, there are sixty-eight yards of its course driven through a grit-stone, without the archway being bricked as it is in other places. On the north of Staveley, the canal is cut deep through the west Dolee ridge of hills. There is an aqueduct bridge over the Dolee, near Staveley, and another over the brook at Renishaw furnace. In Killamarsh there is a road arch under the canal.—Respecting the rates or tolls, we find that the Act limits the tonnage for lime to 1*d.* per ton per mile, and $1\frac{1}{2}d.$ per ton per mile for coals, lead, timber, stone and all other goods, except manures for the lands of any person whose estate has been cut through by the canal, which are to pay only $\frac{1}{2}d.$ per ton per mile. Hay and corn going to be stacked, and materials for the repair of roads, may be navigated toll-free for five miles. Goods are not to remain more than twenty-four hours on the Company's wharfs without paying wharfage; for the next six days 3*d.* per ton may be charged.

Erewash Canal.

The *Erewash canal* had its origin in the desire of the owners of extensive coal mines, situate on the borders of Nottinghamshire, and an Act was obtained for its formation in the 17th year of the late king's reign, and another for the regulation of its tolls in the 29th.—The engineer was Mr. William Jessop, and, under his superintendance, it was completed in a very few years. The general direction of this canal is chiefly along the course of the Erewash valley, and by it the county exports coals, limestone, iron, lead, various kinds of stone and marble, and imports corn, malt and timber. It commences in the Trent navigation at Trent lock, near Sawley,

and terminates in the Cromford canal at Langley bridge. On the north-east of Stanton-by-Dale it is joined by the Nutbrook canal, and about half a mile south of Sandiacre it unites with the Derby canal. The whole length of this canal is ten miles and three quarters; and there are twenty-five bridges across it. Its northern end is elevated, and the rise is one hundred and eight feet and two-thirds, by means of fourteen locks. Over the Nutbrook, on the north-east of Stanton, and over the Erewash above Newmanley's mill, this canal is conveyed on aqueduct arches. Some of the coal-seams of the Newthorpe-common colliery are continued under this canal for a considerable distance, without any injury to the interests of the Canal Company.—By the Erewash canal much of the coal-trade is carried on, and previous to the year 1798, the quantity or weight allowed to a ton varied at almost every coal-wharf, so that the Navigation Companies were greatly inconvenienced in collecting their tonnage duties. Meetings of the committees from nine* Navigation Companies took place in the year above-mentioned, and it was agreed that weighing-houses should be erected upon the several canals, and that the ton should be fixed at 2,400 *lbs.* One of these weighing-houses is situate on this canal at Sawley wharf.

Nutbrook Canal.

The *Nutbrook canal* may be considered as a branch of the Erewash navigation. It commences in the last-mentioned canal, about a quarter of a mile south of Trowell, and terminates at Shipley wharf, from which there is a rail-way extending half a mile to the colliery. The Act for this canal was obtained in the year 1793. Edward Miller Mundy, esq. and the late Sir Henry Hunloke, bart. were the chief promoters of the undertaking. The Company was authorised to raise the sum of £19,500. in £100. shares. The extent of the canal is four miles and three quarters in the county of Derby, and its course is along the Nutbrook vale. Coal and limestone are the principal and almost only articles conveyed upon it. The proprietors of adjoining estates are allowed to make branches from it, and the agents of Earl Stanhope claim the carriage of ironstone and limestone, duty free, to the Dale-Abbey furnaces. A very large reservoir in Shipley park, and four smaller ones, in or near the park, supply this canal in part. It has also a feeder from Dale-Abbey brook.

Peak Forest Canal.

The *Peak Forest canal* navigation was constituted and regulated by Acts passed in the 34th, 40th, and 45th of George III. Mr. Benjamin Outram was the engineer, and Mr. Thomas Brown superintended the construction. In 1797 it was completed with the exception of the Marple locks, which were opened in 1803. The extent of this canal is about twenty miles and a quarter in the counties of Lancaster, Chester and Derby; and the articles principally conveyed by it are Peak Forest limestone, coals, paving stones, iron, deals, &c. It branches out of the Ashton-under-Lyne canal, near Dunkinfield bridge, and crossing the river Tame, passes Denton and Marple-chapel to Whaley-bridge, where it enters Derbyshire; and thence a rail-way extension passes on by Chapel-en-le-Frith to the Bar-moor or Loads-Knowl and Dove-hole quarries. The width of the canal is thirty feet at top and fifteen at bottom, and the depth five feet and a half. The locks are seventy-two feet long and eight wide, and their general rise about

* The Erewash, Derby, Cromford, Grantham, Leicester, Melton-Mowbray, Nottingham, Nutbrook and Trent Companies.

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thirteen feet each. Sixteen locks occur in the space of one mile and a quarter below the Marple lime-works, but the places of the Marple locks were at first supplied by a steep rail-way or inclined plane for trams, from 1797 to 1806. On the great inclined plane, about half a mile east of Chapel-en-le-Frith, there is a double rail-way, with a large inclined wheel or pulley, over which is passed an immense endless chain: to this the trams are linked, and are continually ascending and descending. There is also an inclined plane with a double rail-way at the Loads-Knowl quarry: it is three and thirty yards in extent, and has a horse-gin wheel at the top which draws up the loaded trams and lets down those that are empty. The rail-way extension was at first made single, but in 1803 it was re-laid with a double road. The bodies of the trams are made of rolled plate-iron, and carry 45 *cwt.* each.—The great Marple aqueduct bridge, over the Mersey, about a quarter of a mile below the junction of the Etherow and the Goyte, is among the most considerable of the works of this kind in the kingdom. It consists of three equal semi-circular arches of sixty feet span each; the middle one is seventy-eight feet high, and the whole structure has an elevation of one hundred feet. The river, except in times of floods, is confined to the middle arch. The lower halves of the piers are constructed of rough red masonry, from Hyde-bank quarry: the upper part is of handsome white hewn masonry. Four cylindrical apertures are worked through the haunches of the arches in order to lighten them. The abutments widen downward in well-proportioned curves, and the walls diminish upward in the same manner. The building unites solidity with elegance, and its position amidst the wild features of nature gives it a bold and romantic character. "Where the river, after passing Marple bridge and winding through the meadows, withdraws from the scene" says Mr. Rhodes in his Peak Scenery "the aqueduct of the Peak Forest canal, spans the busy stream and frets and foams over its rocky channel in the glen below. This elegant structure has the appearance of a Roman bridge of three arches, and it emerges from the woods with uncommon grace and dignity. A finer object in landscape is but seldom seen; and when the mild radiance of an evening sun is playing amongst the trees with which it is connected, and tipping the topmost branches with light, whilst all below is reposing in shadow, the view from Compstall House* is one continued scene of beauty." There is also a smaller aqueduct of two arches, which sustain the canal over the Goyte and a bye-road, at Bottom-hall near Whaley bridge; besides several others beyond the limits of this county.—The Peak Forest canal is wholly supplied by flood-waters, reserved in the Coomb's-brook reservoir of forty-five acres, at Tunstead Milltown. The water for the canal passes through iron pipes which are laid under the bed of the Goyte. —The rates on this canal are 1*d.* per ton per mile for stone and coal; $1\frac{1}{2}d.$ per ton per mile for burnt lime, and 3*d.* wharfage. The Company was authorised, by the Act of Parliament in 1794, to raise £150,000. in £100. shares; and eight years afterwards the shares bore a premium of £10. per cent. They subsequently obtained permission to increase the number of shares; and we have been informed, that the works, which are every where

Marple Aqueduct.

* The residence of G. Andrews, esq. proprietor of the cotton-printing works at Marple.

executed with great skill, over one of the most discouraging tracts of country, considerably exceeded the original estimate.

Cromford Canal.

The *Cromford canal* takes a course of fourteen miles and three quarters in the counties of Derby and Nottingham. Its northern parts are considerably elevated, and it penetrates the east Derwent ridge by a tunnel. Its object of transit downwards are coals, limestone, mill-stone and grind-stones, freestone, marble, chert, lead, iron, &c. while in its upward transit, it carries malt, timber as well as coals from the lower pits. It commences in the Erewash canal at Langley bridge and terminates at the town of Cromford. From Codnor lower park and other places, there are cuts from three furlongs to twenty furlongs in length; and the connecting rail-ways are numerous. In the village of Fritchley, the Crich rail-way passes over a stone bridge and again over a private road on a wooden bridge, and enters the limestone quarry by a tunnel, one hundred yards in length. At Bull-bridge this rail-way is continued to machines on a high bank, where the contents of the trams are shot down an inclined plane into iron boats.—The width of this canal is twenty-six feet at top, and the regular canal boats are eighty feet long, seven feet and a quarter wide, and three feet and a half deep. From the Erewash canal to the Pinxton branch, the extent is three miles and a half, with a rise of eighty feet; thence to Pentrich-lane, four miles level; thence to the south end of Bull-bridge aqueduct, one mile level; thence to Lea-wood cut, at the east end of the Derwent aqueduct, four miles and a half level, and thence to Cromford wharf, one mile and three quarters, also level.—The tunnel at Butterley is driven through coal-measures, two thousand nine hundred and seventy-eight yards in length and about fifty-seven yards below the ridge: it is lined with brick, except where the perforated rock appeared capable of its own support. The crown of the arch is eight feet above the water's edge, the water being at its surface nine feet wide. The expense of the tunnel was £7. per yard.

Near Bull-bridge, there is a short tunnel through the limestone. At Wigwell, this canal is carried over the Derwent in a large aqueduct bridge, two hundred yards long and thirty feet high: the river-arch is eighty feet span, and there is a smaller arch on each side for private roads. This aqueduct was built in 1792.—Over the Amber river at Bull-bridge there is an aqueduct of equal length, and fifty feet in height. These two aqueducts cost upwards of £6,000.—This canal is supplied with a very considerable stream of warm water from Cromford sough, and it is probably in consequence of such supply that this canal, west of Butterley tunnel, very rarely, if ever freezes. The Company is authorised to require mine-owners, within a thousand yards of their line and branches, to lift their water high enough to run by proper feeders into this canal; the Company paying any extra expense. Coal-masters are restrained, by the Act, from working under the canal, until they shall have given notice to the Company, to purchase the coals under the same at a valuation: but it being found that little damage is done to the canal-works by such working of the coal-seams, the Company has for several years past, left the coal-owners to their own determination.—The Act for this canal was obtained in the 29th year of George III. The engineers employed were Mr. William Jessop

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and Mr. Benjamin Outram, besides Mr. Dadford, Mr. Sheasby and Mr. E. Fletcher. The canal was opened in 1793. The tonnage allowed to be taken in this canal, is not to exceed 1*d.* per ton per mile, for coals, coke and limestone, and 1½*d.* per ton per mile for all other goods that have not passed from the Erewash canal; 2*d.* per ton per mile for all goods that have so passed; 3*d.* per ton extra on all goods (except coals, coke and limestone) passing from or to this canal and the Erewash canal; 1*s.* per ton extra, on coals navigated between the Amber aqueduct and Cromford, or within two miles east of that aqueduct, and passing towards it. The tonnage upon this canal was in the year 1828, as follows, viz.: 230,000 tons of coal or coke; 24,000 tons of lime and limestone; 12,000 tons of gritstone; 24,000 tons of timber, slate, &c.; 17,000 tons of iron, ironstone and lead; 18,000 tons of corn, groceries, &c. making in the whole 325,000 tons; and the dividend to the share-owners was £19. upon the original £100. shares. These shares are now worth about £400. each.—In 1810 the dividend per share was £10.—The canal has been completed about thirty-four years. By Act of Parliament, the Company was authorised to raise £46,000. in £100. shares; and to borrow £20,000. on interest or mortgage of their tolls. The total cost of making the canal was little less than £80,000. which obliged the Company to call upon the original share-owners for a surplus of £20.

Pinxton Rail-road.

The *rail-road* from Pinxton to Mansfield is connected with the Cromford canal. It was completed about the year 1819. The amount of tonnage from 1819 to 1826 is stated to have been as follows, viz.:

Tonnage.

	tons	*cwt.*
Coal to Pinxton	52,366	1
——— Mansfield	175,326	14
Lime and plaster	7,495	16
Stone and bricks	20,958	2
Sand	21,038	14
Iron and metal	2,007	6
Timber and slate	3,555	18
Lead	73	15
Merchandise	7,595	11
Corn and malt	3,548	15
Clay and minium	713	0

making a total of 294,679 tons.—In the year 1826, the amount of the tonnage-dues was £12,707. 3*s.* and a dividend of £3. on each share was paid in May, 1826.

Ashby-de-la-Zouch Canal.

The *Ashby-de-la-Zouch* canal, obtained the authority of an Act of Parliament in the year 1795. The Company were permitted to raise £200,000. in £100. shares; and it is stated, that the late Marquess of Hastings took eighty shares, and expended £30,000. in erecting an iron-furnace on its banks at Warren-hill. The general direction of this canal and its rail-way extension, passes into the counties of Warwick, Leicester and Derby; its greatest elevation being about two hundred and ninety feet above the high-water mark, at Gainsborough. Its principal objects are the carrying of

limestone from Ticknall and Cloud's-hill, and coals from different collieries in the Ashby-de-la-Zouch field. The commencement of this canal is at Marston-bridge, near Bedworth, in the Coventry canal; and at Willesley wharf, about a mile north of Measham, the rail-way commences, and proceeds to the lime-works on the east side of Ticknall. From Willesley wharf, a branch proceeds past Donisthorpe colliery to the pits on Ashby-Wolds. From the tunnel-house, one mile north of Ashby, there is a rail-way branch, and from Measham another rail-way branch extends about a thousand yards northward.—From Marston-bridge to Willesley wharf, the length is twenty-eight miles and three quarters without any locks, and the Donisthorpe branch is also level, and the whole forms, together with the summit pound of the Coventry canal and its branches, and the adjoining pound of the Oxford canal, the longest level piece of artificial water in Great Britain or perhaps in Europe, being seventy-five miles and three quarters in length! It is at the same time a singular circumstance, that this level line of water crosses the Grand ridge without a tunnel. On the eastern side of the Grand ridge, the ridges of the Mease branch out,* and through these ridges, which are somewhat higher than the Grand ridge near Bedworth, the line is tunnelled. Through the tunnel there are six hundred yards of single rail-way; but from Willesley wharf to the entrance of the tunnel, the rail-way is laid double. This canal is wide and deep and is adapted for boats of sixty tons burden. At Willesley wharf, boats formed of wrought-iron plates, rivetted together, are sometimes used in the carriage of limestone. The whole extent of this line, with its branches, is about fifty miles. The tonnage-rate varies on different kinds of articles from 2*d.* to $\frac{3}{4}d.$ per ton per mile.

Derby Canal.

The Act of Parliament for the *Derby canal* was obtained in the year 1793. The Company was authorised to raise £90,000. in £100. shares, on which the dividends are never to exceed £8. per cent. annually. When £4000. should be accumulated as a stock for contingencies, it was ordered that the tolls should be reduced. Separate rates of tonnage are limited by the Act, on different parts of the canal and its branches. Manures are to pass free, and puncheons† or clogs of wood for the adjacent coal pits; and it was also enacted, that if the Derby and Mansfield turnpike-road tolls, should be reduced below £4. per cent. on their debt, the Company was to make them up to that sum; and it was further enacted, that *five thousand tons* of coals, annually, should be allowed to pass to Derby, toll free, for the use of the poor: and that three members of the corporation, with the same number of the share-owners, should be chosen to distribute such coals. The engineer for this canal was Mr. Benjamin Outram, and it was executed with great skill and despatch.—It commences on the Trent and Mersey canal, north of the Swarkstone bridge, and proceeding to the town of Derby, it branches off to Sandiacre, where it terminates in the Erewash canal. The general object of this navigation is the supply of Derby with coals, building-stone, gypsum and other articles, and for manufactured

* See pages 6 and 9.

† Almost throughout Derbyshire, the principal appropriation of the under-wood is to *puncheons* or supporters for the coal pits: for which purpose the underwood should stand from twenty-one to twenty-eight years.

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goods, for cheese and other agricultural purposes. It is also convenient for conveying the Peak limestone into the south-eastern parts of the county. —From Derby a short branch of this canal extends to Little Eaton, with two arms to the quarries on Little Eaton common. On the north-east of Derby, a short cut and a lock serve to conduct boats into the pound of the river above the silk-mill dam, near St. Mary's bridge; and there the river is navigable to Darley mill. Towards the south of the town there is a large wear, above which the canal-boats are towed across the river, by means of the towing-bridge mentioned at page 257. The Derwent was formerly navigable downwards from this wear to the Trent, and on the construction of the Derby canal, a connexion was entered upon with the Derwent Navigation Company; but this was speedily dissolved, and the Derby Canal Company payed £40,000. as a compensation to the members of the Derwent Navigation, which the canal had rendered entirely useless. Over the Markeaton brook, on the south-east side of Derby, in the Morledge, the canal is conveyed in a low, cast-iron trough or aqueduct, erected in 1795. On Sinfin Moor there is a small aqueduct and a high and long embankment, and at Chaddesden, Ockbrook and Risley brooks, there are small aqueducts.*—At St. Alkmund's in Derby there are large warehouses under which the boats pass to load and unload.—This canal is forty-four feet wide at top, twenty-four at bottom, and five feet deep. The summit pound of the Little Eaton branch, for about a mile and three quarters in length, is cut six feet deep, in order to act as a reservoir. A market-boat, decked over, with seats and a fire-place for the accommodation of passengers, starts from Swarkstone every Friday morning, to carry market-people to Derby; and leaves Derby at four o'clock for Swarkstone.

Adelphi anal.

The *Adelphi canal* is a small private navigation, constructed about the year 1799, as an appendage to Mr. Ebenezer Smith's iron-furnace, at Long Duckmanton. It is serviceable in conveying goods from the Duckmanton-works to Stavely, in their way to the Chesterfield canal; and it is also intended to act as a reservoir for the use of the several steam-engines at the works. The water which supplies it is almost entirely lifted from the coal-mines. The small boats used upon it do not carry more than thirty hundred weight each.

Wood-Eaves Canal.

The *Wood-Eaves canal* was constructed about the year 1802. It is a private navigation of about ten furlongs in extent, belonging to the cotton-mills at Fenny Bentley.

There are private *rail-ways* in various parts of the county, generally connecting the colliery or iron-works with the canals.

Trent Navigation.

The only natural navigation remaining to this county is a short part of the lower Trent, to the extent of about five miles, from the mouth of the

* From the Trent and Mersey canal to the stop-lock at Cockpit-hill wharf, Derby, five miles and a half, is a rise of twelve feet, by two locks; thence across the Markeaton or Morledge brook and the Derwent (through the lower dam) to the Darley-mill branch, and the warehouses in St. Alkmund, a quarter of a mile is level; thence to the Little Eaton branch, three furlongs, level; thence to the Erewash canal, eight miles and five furlongs, with a fall of twenty-nine feet, by four locks. The detached part of three furlongs has a fall with three locks, to the Trent. The Little Eaton branch, three miles, with a rise of seventeen feet, by four locks.—The lengths on the rail-way extension are as follows: from the wharf at Little Eaton, to the branches into Little Eaton common quarries, *five furlongs;* thence to the Denby-hall branch, *four miles and six furlongs;* thence to Roby west-field colliery, *five furlongs.*

Trent Navigation.

Erewash river to Wilden ferry in Shardlow. In 1761, the celebrated engineer, Mr. John Smeaton, examined this part and seven miles further down the Trent, and found that in dry seasons there was not more than eight inches depth of water over the shoals, and that it was impossible for boats to pass, except by the aid of flushes of water let down for that purpose at King's Mills (the lowest on the Trent) and from Little Wilne mill on the Derwent. To remedy this inconvenience, a side cut of ten miles was proposed to be made, and an Act of Parliament was obtained, but the plan has not been carried into effect. The gravel and other deposits are occasionally removed from the shoals by a sort of dredging-machine called a *gravel plough*, which consists of a large iron shovel, suspended between four large wheels and drawn by four horses.

Conveyance.

With these roads and canals, the facilities of communication and of the interchange of commodities is great, so that, notwithstanding the irregularity of surface which distinguishes the northern part of the county, there are few parts of England where travellers or visitants, whether business or pleasure be their object, meet with more conveniencies.

The intercourse with the south of England and with Kent and Essex is carried on chiefly by the London mail, which arrives in Derby at half past nine in the morning, and leaves that town at half past four in the afternoon. The same mail-coach proceeds onwards through Ashbourn, and thus carries on the communication with Manchester and Liverpool, the whole of the north-west of England, Glasgow and the south-west of Scotland, and with Dublin and the north of Ireland.—With the south-west and west of England, including Bristol, Bath and the manufactories of Somersetshire, and with Wales and the south of Ireland, the intercourse is carried on by the Birmingham mail, which arrives in Derby every morning. By the Nottingham and York or northern mails, there are constant communications between this county with the north-eastern districts of England, with Edinburgh and the eastern parts of Scotland. There are also numerous stage-coaches, and cars to various towns within and beyond the county, which are enumerated with the time of their arrival and departure in the Directory portion of this work, where will also be found lists of carriers, vans, wagons and fly-wagons and of the canal-boats and fly-boats.

Such are the means of carriage and of commercial communication within the county itself, and with other parts of the kingdom. The internal trade possesses the advantage of well-frequented fairs and markets. The fairs are held at about four and twenty of the principal towns and villages. The cheese-fairs of Derby are much frequented by dealers and factors. There are also cheese-fairs at Chesterfield, Ashbourn and Chapel-en-le-Frith. Cattle-fairs are principally held in Derby, but there are also very considerable fairs for cattle in other parts of the county. Fairs in which horses and horned cattle are met with in great abundance are held at Ashbourn, where on St. Andrew's day particularly, horses continue to arrive from the neighbouring and even distant counties during the preceding week. Sheep, wool, &c. are found at most of these fairs in abundance. The most celebrated fairs for shows, ribands, toys, &c. commonly called holiday or gig fairs, are the Whitsun-Friday fair at Derby and the October fair at Newhaven.—

Fairs and Markets.

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There are in this county eight market towns which are well attended, and at Buxton, Belper and Cromford, markets have been established of a more modern date, the two last having been rendered necessary by the increasing population which the manufactories of Messrs. Strutt and Messrs. Arkwright drew to those places. Formerly there were markets held at Bolsover, Crich, Higham, Matlock, &c. but they are either much declined or wholly discontinued.—Auctions are conducted as in other parts of the country. Sales by ticket* are known chiefly among wood-dealers, who purchase the spring-wood of twenty-five years' growth, according to the ticketed value set upon it by professional wood-valuers, engaging to cut and clear it away by the Lady-day next following, and to pay the money in moieties, at the Midsummer and Christmas following the sale.

Auctions.

In what may be termed the external commerce of the county, it will not be supposed, that an inland district can boast of an equality with some of those busy and improving parts of the kingdom that lay upon the coast; yet, by means of the Trent and of the various canal navigations, it participates largely in the general trade and transit of commodities enjoyed by the kingdom at large.

Circulating Medium.

The principal *circulating medium*, until the recent Act of Parliament for suppressing the issue of one-pound-notes, was, together with the silver and copper coin of the realm, chiefly the promissory paper of resident bankers, who are distinguished and esteemed for their solidity and probity; and it has been remarked, that a decided preference was given, by the receivers of payment, to these notes of our local bankers, to those of the bank of England. The names of the bankers of the county, and of the bankers in London, on whom they usually draw, will be found in the Directory part of this work.—Silver tokens, purporting to be of one shilling value, issued by different manufacturers in Sheffield and other places, were, during the latter years of the last war, in considerable circulation; and this species of money yielded very slowly and reluctantly to the Acts of Parliament that were passed to suppress them. The Soho coinage of copper was also, during the same period, extensively circulated in all parts of the county, and always preferred to the old tower half-pence.† During the seventeenth century, there were many tradesmen's copper tokens struck in the town of Derby; and those in the following list are still in the possession of William Bateman, esq. F.A.S. Rev. R. Simpson, F.R.S. &c. and Mr. John Swanwick.

* Sales by ticket are in some parts of the county conducted in a very particular manner. They are thus described by Mr. Farey. "In Glossop the timber and wood is sold standing, as by that means the auction duty is avoided: but more commonly the sale is by ticket, the process of which was described to me by Mr. Matthew Ellison, agent to the Hon. Barnard Edward Howard.—The buyers and the vendor being assembled at a public house, the vendor puts a folded ticket, containing his price of the lot about to be sold, into a glass on the table; each of the buyers does the same, and then the vendor opens all the tickets but his own, and declares the name of the highest bidder, but not the amount of his offer: a second delivery of tickets by the buyer then takes place, and the name of the highest bidder amongst them is again declared; and then a third delivery, which, according to the practice about Glossop, decides the sale; unless on opening the vendor's ticket, none of the biddings come up to it, when the sale is void, unless the highest bidder, or the next or the following in succession, should agree to come up to the vendor's price in the ticket, the amount of which is however not declared, unless a disposition manifests itself among the buyers, to further advances."

† I saw the toll collectors, on several roads, peremptorily refuse these still legal coins of the realm, and shut their gates against the traveller, until he produced a sixpence or shilling, or more probably a token for change. *Farey*, Vol. III. page 512.

A list of tradesmen's Copper Tokens, struck in the town and county of Derby.

Tradesmen's Copper Tokens.

ALFRETON ..... 1. *Obverse*, Cornelius Launder (arms)—*Reverse*, in Alfreton, 1663.
2. *Ob.* Robert Wright (device, a bee-hive)—*Rev.* of Alfreton, 1668 (device, a man's head.)

ASHBOURN ..... 1. *Ob.* Thomas Baguley—*Rev.* in Ashburne.
2. *Ob.* William Brunt—*Rev.* in Ashburne, 1671 (W B.)
3. *Ob.* William Froggat (arms)—*Rev.* in Ashburne, 1664.
4. *Ob.* Daniel Mosley—*Rev.* in Ashburne, 1669 (DM.)
5. *Ob.* Richard Watson (arms)—*Rev.* in Ashburne, 1663 (his halfpenny.)
6. *Ob.* Marie Sleigh (arms)—*Rev.* in Ashburne (her halfpenny.)

BAKEWELL ..... 1. *Ob.* John Dickens of—*Rev.* Backwell, 1669.
2. *Ob.* Thomas Grammer (arms)—*Rev.* in Backwell, Darbyshire (G / TM.)

BELPER..... 1. *Ob.* Joseph Clarke at (a crown)—*Rev.* Belpar lane end (J. C.)
2. *Ob.* James Jackson of (arms)—*Rev.* Belpar (his halfpenny.)

BIRCHOVER ..... 1. *Ob.* Humph. Smith in (S / H. E) Birchover, Derb.—*Rev.* his halfpenny (D / I.) 1671.

BOLSOVER..... 1. *Ob.* Richard Southworth (arms)—*Rev.* in Boulsover, 1667 (his halfpenny.)

BONSAL ..... 1. *Ob.* John Dudley (arms)—*Rev.* of Bounsall (I. D.)

BRAILSFORD..... 1. *Ob.* William Webb of (arms)—*Rev.* Brelsforth, 1671 (a halfpenny, W. W.)

BRASSINGTON ... 1. *Ob.* Danl. Bagshaw (arms)—*Rev.* in Brassinton, 1663 (DB.)

CHAPEL-EN-LE-FRITH 1. *Ob.* Nicholas Smith (16 † 71)—*Rev.* in Chapell Frith (His / N S / ½)

CHESTERFIELD... 1. *Ob.* Richard Clarke at the—*Rev.* Angell in Chesterfield (C / RA.)
2. *Ob.* James Dutton (device, a lion)—*Rev.* in Chesterfield, 1666.
3. *Ob.* William Millnes—*Rev.* in Chesterfield, 1667.
4. *Ob.* Thomas Radford in (arms)—*Rev.* Chesterfield, 1666.
5. *Ob.* Edward Wood, apothecary—*Rev.* in Chesterfield.
6. *Ob.* Richard Wood—*Rev.* of Chesterfield (R W.)

CRICH..... 1. *Ob.* Thomas Lowe of—*Rev.* Critche, butcher, 1669.

DERBY ..... 1. *Ob.* John Dunnidge (arms)—*Rev.* (D / ID.) in Darby, 1663.
2. *Ob.* Thomas Beebye (arms)—*Rev.* in Darby, 1664 (his halfpenny.)
3. *Ob.* Benjamin Smedley (arms)—*Rev.* in Derby, 1664 (his halfpenny.)
4. *Ob.* Richard Bakewell, of Derby (his halfpenny) 1666—*Rev.* "Good morrow Valentine" (device, two doves meeting.)
5. *Ob.* Richard Biggin, in Darby (their halfpenny)—Richard Lister, 1666.
6. *Ob.* Edward Denty (lady's head with a bonnet)—*Rev.* in Darby, 1667 (his halfpenny.)
7. *Ob.* George Southern (his halfpenny)—*Rev.* in Derby, 1667 (S. / G. M.)
8. *Ob.* John Bancroft—*Rev.* in Derby, 1667 (his halfpenny.)
9. *Ob.* Richard Cordin (arms)—*Rev.* in Derby, 1667, (his halfpenny.)
10. *Ob.* Joseph Moore (his halfpenny)—*Rev.* in Derby, 1667 (I. M.)
11. *Ob.* Luke Neyld, in Darby, 1667 (a harp in base)—*Rev.* Morat, a Turk's head.
12. An octagonal one of the same.
13. *Ob.* James Palmer (a flower)—*Rev.* in Darbie (his halfpenny) 1667.
14. *Ob.* Henry Moore (his halfpenny)—*Rev.* (M / H. E.) in Derbie, 1668.
15. *Ob.* Thomas More (a device)—*Rev.* (his halfpenny) in Derbie.
16. *Ob.* George Blagrave (hand holding a sceptre) 1668—*Rev.* in Derby, his halfpenny (a crown.)
17. *Ob.* Thomas Lockhart, 1668—*Rev.* shoemaker at Darby (his halfpenny.)
18. *Ob.* Thomas Brooks—*Rev.* in Derby, 1668 (his halfpenny.)
19. *Ob.* William Dawson—*Rev.* dier in Darby, 1669 (his halfpenny.)
20. *Ob.* Robert Fearbrother (his halfpenny)—*Rev.* in Derby, 1669 (his arms.)
21. *Ob.* Robert Litchford—*Rev.* in Derby, 1669 (his halfpenny.)
22. *Ob.* William Newcomb, "Touch not mine anointed"—*Rev.* "Doe my prophets no harm." Darby. (W. N.)

DORE..... 1. *Ob.* Robert Unwen, in (hammer and pincers)—*Rev.* Dore in Darbyshire (R. V. / ½)

DRONFIELD ..... 1. *Ob.* John Bate, 1666 (arms)—*Rev.* of Dronfield.

DUFFIELD..... 1. *Ob.* Dorothy Rossington in—*Rev.* Duffield neare Darbye, 1669.
2. *Ob.* John Maylyn in (His / half- / penny)—*Rev.* Duffield neare Darbye, 1669.

ECKINGTON ..... 1. *Ob.* Henry Hazlehurst—*Rev.* in Eckington (HH. / 1667.)

HARTINGTON ... 1. *Ob.* Thomas Bateman, 1670—*Rev.* in Hartington (arms.)

HARTSHORN-LEA-END 1. *Ob.* IT The anchor at Harts-—*Rev.* Horne Lea End IT.

HIGHAM..... 1. *Ob.* Edward Parkes (P / E. R.)—*Rev.* in Higham.
2. *Ob.* John Lowe of Higham, butcher, 1669—*Rev.* his halfpenny (arms.)

REPTON..... 1. *Ob.* Matthew Wilkinson (a crown)—*Rev.* of Repton, 1671 (see Gent's. Mag. Oct. 1791.)

CHAP. 5.

Tradesmen's Copper Tokens.

STONEY MIDDLETON 1. *Ob.* Dennis Ragg *(f. f. f.)*—*Rev.* Stoni Middleton, 1670.

TIDESWELL ..... 1. *Ob.* Robert Bagshaw—*Rev.* in Tidswell, 1667 $\left(\frac{B}{RS.}\right)$
2 *Ob.* Edward Ashe (arms)—*Rev.* in Tidswell, 1667.
3. *Ob.* William Ashe in Tidswell, 1670—*Rev.* his halfpenny (W. A.)
4. *Ob.* Gervase Gent of Tidswall—*Rev.* (arms.)
5. *Ob.* Richard Middleton (his halfpenny)—*Rev.* in Tydswall, 1669 (†).

WINSTER ..... 1. *Ob.* Ralph Bowers (arms)—*Rev.* in Winster, 1666 $\left(\frac{B}{RE.}\right)$

WIRKSWORTH ... 1. *Ob.* John Booth (arms)—*Rev.* in Wirksworth (IB.)
2. *Ob.* Thomas Wigley (TW)—*Rev.* in Wirksworth (arms.)
3. *Ob.* Anthony Kempe, in (royal arms)—*Rev.* Wirksworth, 1666 (AK.)
4. *Ob.* Peter Coulborn, in (arms)—*Rev.* Wirkesworth, his halfpenny (PC.)
5. *Ob.* Richard Heape (arms)—*Rev.* in Wirksworth (RH.)

YOLGRAVE..... 1. *Ob.* Robert Birds (arms)—*Rev.* in Youlgrave (RB)

HIGH PEAK ..... 1. *Ob.* High Peak coal mines (arms)—*Rev.* in Darbyshire (a crest.)

Agriculture benefited by Commerce.

We cannot conclude this chapter without noticing the frequently urged question relative to the effects of manufacturing enterprise upon the interests of the agriculturists; particularly as this county combines and intermingles those interests more closely than almost any other district of the realm. We may safely admit, that farming has been a less profitable pursuit, than the many species of manufactures carried on in Derbyshire; and it is also probable that the land-owners in this neighbourhood are more affected in their interests by manufactures than by general commerce; but, it is equally certain that the profits of manufacture, together with the accumulating population which is drawn around it, must have a tendency to stimulate agricultural industry. Agriculture has, undoubtedly, obtained many very substantial advantages from the proximity of enterprising capitalists, and we need only to point out the north-western district of the High Peak, where agricultural improvements would not have been known, had not the streams in its barren and mountainous declivities invited manufacturers to render their waters subservient to the purpose of the powerful machinery which gradually arose upon their banks. It has also been observed, that when men of commercial and manufacturing pursuits engage in agriculture, they soon acquire sufficient experience to enable them to carry into effect very considerable plans of draining or irrigation and of other modes of meliorating the land and of rendering it more generally productive, than would have ever entered into the imagination of the habitual or regularly bred farmer. In a word, we may venture to assert, that these interests which are often thought to be in conflict, have, in reality, a mutual accordance with each other.

CHAPTER VI.

Antiquities: British remains; Castle-hill Barrows, Arbelows; Roo-Tor rocks, Graned Tor and other Tors, Nine Ladies, Rocking-stones, Robin Hood's mark, &c. Celts, &c.—Roman antiquities, camps, stations, coins, &c. Ancient, Saxon, Danish and other remains.

Antiquities.

THE antiquities of any country or district are those vestiges of its earlier inhabitants, by the investigation of which, much of their origin, their manners and their superstition may be discovered. They aid the labours of the historian, and serve, frequently, either to corroborate or confute the voice of popular tradition or the legends of the poets. In Derbyshire there are many of these important memorials, but it will be our business to describe them and to leave their critical examination to others. Of those that are to be ascribed to a period antecedent to the invasion of this island by the Romans under the command of Cæsar, there are remains probably belonging to the worship and interment of the Britons, the earliest inhabitants of this island known to authenticated history.

Castle-hill Barrows.

At Pilsbury, in Hartington parish, in a deep valley on the banks of the Dove, in a field called *Castle-Hills*, are some ancient remains deserving of notice. On the east side is a sharp natural ridge of rocks, which in one part rises to the height of seven or eihht yards, bearing some resemblance to a sugar loaf. Adjoining to this is a raised bank, inclosing an area of about sixty yards from north to south, and forty from east to west; and having a barrow near its western side, about forty yards in diameter. Southward of the barrow is a second bank, forming a square of nearly thirty yards each way.

Wolf's-cote Hill Barrow

A large barrow is to be seen on a high eminence called Wolf's-cote hill, in Hartington parish; and upon the common which extends ten miles in the direction of north and south, are many barrows, generally situate on the highest points of ground. Near Brassington there is a remarkable low or barrow, called Mining low, having a number of vaults carried round its circumference, several of them now exposed to sight. During the time of the enclosure, a quantity of human bones were found on the moor.

Mining Low.

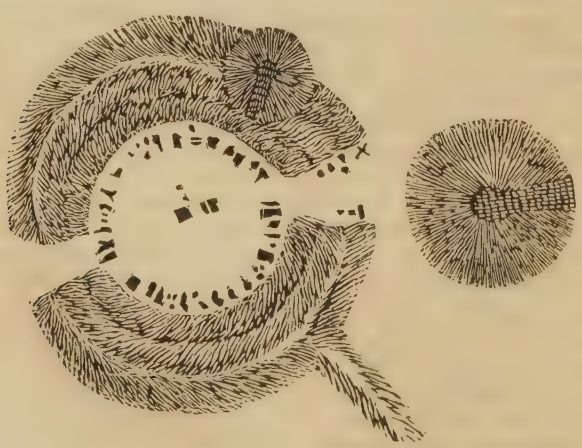
Arbor-Low or Arbelows.

Between two and three miles north-east of Newhaven, at a little distance beyond the Roman road from Buxton to Little Chester, is one of the most remarkable monuments of antiquity in Derbyshire. This is the ARBOR-LOW or *Arbelows*, a Druidical circle, surrounded by a ditch and vallum. Its situation, though considerably elevated, is not so high as some eminences in the neighbouring country; yet it commands an extensive view, especially to the north-east. The area, encompassed by the ditch, is about fifty yards in diameter, and of a *circular form*; though, from a little declination of the ground towards the north, it appears somewhat elliptical, when viewed from particular points. The stones which compose the circle are rough and unhewn masses of limestone, apparently thirty in number; but this cannot be determined with certainty, as several are broken. Most

CHAP. 6. Arbor-Low or Arbelows.

of them are from six to eight feet in length, and three or four broad in the widest part; their thickness is more variable, and their respective shapes are different. They all lie on the ground, and generally in an oblique position; but the opinion that has prevailed, of the narrowest end of each being pointed towards the centre, in order to represent the rays of the sun, and prove that luminary to have been the object of worship, must have arisen from inaccurate observation: for they almost as frequently point towards the ditch as otherwise. Whether they ever stood upright, as most of the stones of Druidical circles do, is an enquiry not easy to determine; though Mr. Pilkington was informed, that a very old man living in Middleton, remembered, when a boy, to have seen them standing obliquely upon one end. This secondary kind of evidence does not seem entitled to much credit, as the view of the stones themselves, and their relative situations, are almost demonstrative of the contrary. Within the circle are some smaller stones, scattered irregularly; and near the centre are three larger ones, erroneously supposed to have once formed a cromlech.

The width of the ditch, which immediately surrounds the area on which the stones are placed, is about six yards; the height of the bank or vallum, on the inside, is from six to eight yards; but this varies throughout the whole circumference, which on the top is nearly two hundred and seventy yards. The vallum seems to have been formed of the earth thrown up from the ditch. To the enclosed area are two entrances, each of the width of ten or twelve yards; and opening on the north and south. On the east side of the southern entrance is a large barrow, standing in the same line of circumference as the vallum, but wholly detached, excepting at the bottom. This barrow was opened in June, 1782, by H. Rooke, esq. and the horns of a stag were discovered in it:* and June 1, 1824, by Mr. Samuel Mitchell of Sheffield, and the engraving here inserted is copied from an accurate drawing made by that gentleman.



About the distance of half a mile from Arbor-low, to the west, is another

* Pilkington's View of Derbyshire, Vol. II. page 461.

large barrow, called *End-low*, in which ashes and burnt bones have been found. From this, numerous barrows may be seen on the distant eminences; and in some of them, urns, human bones, ashes, and other memorials of the customs of remote ages, have been discovered. The names of several places in this neighbourhood are also indicative of antiquity, though the places themselves are now of little account; as *Aldwark*, five miles south of Arbor-low, on the Roman road from Buxton to Little Chester; *Aldport*, on another ancient way leading from Aldwark towards Bakewell, and some others.

End-Low.

Near to Wardlow, a barrow was examined in the year 1759, by the Rev. Mr. Evat of Ashford. There were discovered in it about seventeen human bodies. These appeared to have been laid on the surface of the ground, upon long flat stones. They were enclosed by two side walls, and the head and breast of each were protected from the incumbent weight of stone by a flat one laid over that part of the top. Two bodies near the middle of the barrow were walled up and covered from head to foot, in the form of a long chest, with a stone cover to each. Jaw bones, teeth, &c. were found undecayed, but none of the larger ones of the body. The low was thirty-two yards in diameter and five feet high. The coffins were two feet deep, and the complete ones seven feet six inches long.

Human bodies discovered.

At the summit of the eminence which rises above the little village of CHELMORTON, there are two considerable barrows, within a short distance of each other. The circumference of the largest is nearly eighty yards; that of the smallest about seventy: on the top of both is a circular cavity or bason. A barrow, about the size of the former of those now mentioned, described by Pilkington, as being situate about a quarter of a mile north-east from Chelmorton, was opened in the year 1782, by some labouring men who were searching for stone to build a walled fence in a neighbouring field. "After removing a thin covering of moss and soil from the lower extremity of the mount or barrow, they discovered a kind of breast-work, or regular wall of single stones, formed without mortar. Not apprehensive of meeting with any thing extraordinary beyond this wall, they proceeded with their work, but were soon surprised with the sight of several human bodies. They found that the wall was at the end of a cell or coffin, in which the bodies had been deposited. The breadth of the cell within was two feet; but its depth was not fully ascertained, though supposed to be about a yard. The sides consisted of stones about eight inches thick and two feet wide; they were placed on their edge, and formed a kind of partition: the stones used for the covering were from one to three inches thick, but not larger.

Barrows at Chelmorton.

Human bodies discovered.

"Though some of the stones and a small quantity of the soil had fallen into the vault, yet several human bodies or skeletons might be clearly distinguished, lying at full length, with their heads towards the centre of the mount. The bones had never been disturbed, and were apparently united at the different joints, but by the slightest motion were found to be entirely loose and unconnected: upon examination, they were discovered to be remarkably strong and sound; the ribs, in particular, were so little decayed, that they would easily bend without breaking. Those who saw the bones, thought that they were uncommonly large; and it was imagined that the

CHAP. 6. persons to whom they belonged, must have been, when alive, at least seven feet high: the teeth were sound and perfect. From the number of bones and skulls, and the dimensions of the vault, it was supposed that it contained about four or five human bodies; and though only one vault was opened, it was presumed that others were carried throughout the whole circumference of the mount, and might be about twenty in number."*

Staden-Low. Between Chelmorton and Buxton, within about one mile of the latter, near a hill called *Staden-low*, are the remains of some ancient earth-works, which Dr. Stukeley has noticed in the second volume of his Itinerary. Since his time the ground has been enclosed and cultivated, but sufficient vestiges may be distinguished to ascertain the form of these memorials of antiquity. They consist of two divisions; an ellipsis and an oblong square. The former, supposed by the Doctor to have been a place for shows, is encompassed by a shallow ditch, nearly a yard and a half wide; and a mound or bank, about one foot high, and seven yards and a half broad: the enclosed area measures forty-five yards from south-east to north-west, and sixty-six from north-east to south-west. The square division is bounded by a vallum, now nearly levelled by the plough, and extends in length forty-five yards and in breadth twenty-four. A small semicircular cove of earth is mentioned by Stukeley as being at the side of the circle furthest from the square.

Barrows. It is very probable, from the derivation of the names of many villages in this county ending in the syllable *Low*, that they were sacred places in the time of the Druids, and may be supposed to contain barrows not hitherto discovered. We may rely upon this conclusion with more certainty, as

Swarkstone-Lows. barrows have been opened at Wardlow and Hurdlow.—The Swarkstone-Lows consisted formerly of three very large mounds, but one of them has been levelled by the plough; and the other two remain in very great preservation. At this ancient pass a battle was undoubtedly fought, although history makes no mention of such an occurrence.—At the small

Priestcliff Low. village of Priestcliff is a low, situate on a lofty eminence, surrounded by a deep valley; and on this eminence there is a singular well, fed by a clear spring, which is said never to fail.—On the top of the Great Finn, in the township of Taddington, there are many ancient British remains.

Mr. Bray, who has described the *Woodlands*, in his Tour through Derbyshire, observes, that a large stone, lying on the side of a hill to the right of the village, was removed some years ago, and that under it fifteen or

Amulet Beads. sixteen *beads* were found, about two inches in diameter, and the thickness of the stem of a large tobacco-pipe: one was of amber, the rest of glass; some black and white, others of different colours. These he imagines to have been amulets, used by the Druids. There are some remains of antiquity near the village of Edale, supposed to be Druidical.

Druid's Altar. This gentleman has also mentioned a pile of unhewn masses of stone, called a *Druid's altar*, which stood in a rough heathy pasture, named Nether-Moor, on the summit of a hill, but was destroyed some years ago for the sake of the stone. "The altar was circular, about sixty-six feet in diameter, composed of rough stone of various sizes, rudely piled together

* Pilkington's View of Derbyshire, Vol. II. page 426.

without mortar or cement, in the form of a haycock, about eighteen feet perpendicular height. The top was hollow, in the form of a bason, about four feet deep and six feet in diameter: the stone on the inside of this bason was black, and much burned, as if large fires had been often made in it." Mr. Pilkington has observed on this passage, that heaps of stone, of a similar appearance, are too common in this part of the country to be supposed Druidical altars; and that, on Stanwich Top, there are at least three of this kind.

Druid's Altar.

On STANTON MOOR, a rocky, uncultivated waste, about two miles in length and one and a half broad, are numerous remains of antiquity, as rocking-stones, barrows, rock-basons, circles of erect stones, &c. which have generally been supposed of Druidical origin; and perhaps with truth, as to the principal mass, though certainly erroneous with respect to the entire detail.

Stanton-Moor Barrows, &c.

At the south end of the moor, close to the village of Birchover, is a remarkable assemblage of gritstone rocks, which extends in length between seventy and eighty yards, and rises to the height of about forty or fifty. This massive pile is distinguished by the name of the *Router* or *Roo-tor-rocks;* an appellation that appears to have been derived from the various

Roo-Tor Rocks.

rocking-stones near the summit; as it is a common expression in the provincial dialect, that a thing *roos* backward and forward.* Its general po-

* Archæologia, Vol. VI. page 110.

CHAP. 6. Roo-Tor Rocks.

sition is undoubtedly natural, and was probably occasioned by the sinking of the surrounding strata; but the forms and arrangement of many stones on the upper part, display evident traces of design.

Near the east end is a vast block of an irregular shape, and estimated to weigh about fifty tons, which several writers have noticed as a rocking-stone, that could be shook by the pressure of the hand; yet it is now immoveable, through having been forced from its equilibrium by the mischievous efforts of fourteen young men, who assembled for the purpose on Whit-Sunday, in the year 1799. Its height is about ten feet, and its circumference in the widest part nearly thirty: its bottom has somewhat of a convex form; and the rock on which it stands appears to have been hollowed to receive it. At a little distance northward is a second rocking-stone, not very dissimilar in shape to an egg, which may be moved by the strength of a single finger, though twelve feet in length and fourteen in girth. More directly north is another rocking-stone, resembling the latter both in figure and facility of motion; and at the west end are seven stones piled on each other, various in size and form, but two or three very large; all which may be shook by the pressure of one hand, and this at various places.

It should be observed, that the huge masses which occupy the summit of the Router rocks, range from east to west along the middle of the hill, and have had a narrow passage and two chambers or caves cut within them. The largest cave has a remarkable sound, and has thence been named the *Echo;* its length is sixteen feet, its width twelve, and its height about nine. The origin of these excavations cannot have been very remote, as the marks of the pick on the sides are very visible and fresh. They were probably formed about the same period as an elbow-chair near the west end on the north side, which has been rudely shaped on the face of a large mass of stone, and has a seat for one person on each side of it. This we have been informed was executed by the direction of Mr. Thomas Eyre, who inhabited the ancient manor-house, called Router hall, near the foot of the hill on the south, between seventy and eighty years ago, and used frequently to entertain company on this elevated spot. A hollow, in the stone which forms the highest point of these rocks, Mr. Rooke supposes to have been a rock-bason; he also mentions a second rock-bason on the north-west side.

Thomas Eyre's Chair.

Nearly a quarter of a mile west of Router is another assemblage of large rocks, forming a similar kind of hill, called *Bradley Tor;* on the upper part of which is a rocking-stone thirty-two feet in circumference, of an orbicular shape, and raised above the ground by two stones, having a passage between them. Its conformity to the description of the *Tolmên* given by Dr. Borlase in his Antiquities of Cornwall, has induced an opinion of its having been a rock idol.

Bradley Tor.

Near the south-west side of Stanton Moor is an elevated ridge, which rises into three craggy eminences, respectively named, *Carcliff rocks, Graned Tor* and *Durwood Tor.* On the top of the former are several rock-basons, varying in diameter from two to three feet; and near the bottom, towards the west, is a small cave, called the Hermitage, at the east end of which is a rude figure of a crucifix, between three and four feet

Carcliff Rocks.

Hermitage.

high, sculptured in high relief on the solid rock. In the inner part is a seat, and a recess, apparently intended for a sleeping-place. CHAP. 6.

Graned Tor, called also *Robin Hood's Stride* and *Mock Beggar's Hall*, Graned Tor.

is a singular heap of rocks, which Mr. Rooke supposes to have been anciently a "curious group of Druidical monuments."* On one rock, that seems, from its present position, to have fallen from the top, and is twenty-nine feet in circumference, are four rock-basons; and at the bottom of another, a rock-bason of an oval form, four feet in length and two feet ten inches wide, which "evidently appears to have been cut with a tool."† This bason is sheltered by a massive stone, placed in a sloping direction against the rock. The uppermost points of this Tor are two vast stones, standing upright, each eighteen feet high and about twenty-two yards asunder, which at a distance resemble the chimneys of an ancient mansion-house, from which circumstance the pile obtained its appellation of Mock Beggar's Hall. Round the bottom of the hill there seems to have been a fence of broken masses of stone. On the top of Durwood Tor are three rock-basons, artificially formed; and an impending crag or rock-canopy, which overhangs what has been denominated an "augurial seat." At *Durwood*, on removing a large stone, an urn was discovered half full of burnt bones; and near it two ancient *Querns* or hand-mill-stones, flat at top and somewhat convex on the under sides, about four inches and a half thick and nearly a foot in diameter; the upper stone so much less than the under, that, being placed on it, it could be turned round within its rim.‡ Similar stones have been found in Yorkshire and Wiltshire, and such kind are yet in common use in the Hebrides.

Durwood Tor.

Querns.

In a field north of Graned Tor, called Nine-stone close, are the remains Nine stone Close.

* Archæologia, Vol. XII. page 47. † Ibid.
‡ Gough's Additions to the Britannia.

CHAP. 6. Nine-stone Close.

of a *Druidical circle*, about thirteen yards in diameter, now consisting of seven rude stones of various dimensions; one of them is about eight feet in height and nine in circumference. Between seventy and eighty yards to the south are two other stones, of similar dimensions, standing erect.

Castle Ring.

About a quarter of a mile west of the little valley which separates Hartle Moor from Stanton Moor, is an ancient work, called *Castle Ring*, which Mr. Rooke supposes to have been a British encampment. Its form is elliptical; its shortest diameter, from south-east to north-west is one hundred and sixty-five feet; its length, from north-east to south-west is two hundred and forty-three feet. It was encompassed by a deep ditch and double vallum, but part of the latter has been levelled by the plough.

In a small enclosure, adjoining the north-west end of Stanton Moor, are some remarkably situate rocks; on two of which the following inscriptions were cut in Roman capitals about one hundred and seventy years ago, by an ancestor of the *Calton* family, who possessed the estate. *"Res rustica quæ sine dubitatione proxima et quasi consanguinea sapientiæ est, tam discentibus eget quam magistris."—"Nihil est homini libero dignius, et quod mihi ad sapientis vitam proxime videtur accedere."*

Calton Inscription.

Nine Ladies.

About half a mile north-east from the Router rocks, on Stanton Moor, is a Druidical circle, eleven yards in diameter, called *The Nine Ladies*,

composed of the same number of rude stones, from three to four feet in height, and of different breadths. A single stone, named the *King*, stands at the distance of thirty-four yards. Near this circle are several cairns and barrows, most of which have been opened, and various remains of ancient customs discovered in them. In one of the barrows, opened by Mr. Rooke, an urn of coarse clay was found, three feet three inches in circumference and ten inches in height, having within it a smaller urn, covered with a piece of clay; in both of them were burnt bones and ashes; two other urns, similar to the former, were discovered in the same barrow. Urns with burnt bones, &c. have likewise been met with in some of the other barrows. Under one of the cairns, human bones were found, together with a large blue glass bead.

Cats' Stone.

On the east side of Stanton Moor, near the edge of a declivity overlooking Darley-Dale, are three remarkable stones, standing about a quarter of a mile from each other in a north and south direction. One of these, called *Cats' Stone*, is on the verge of a precipice, and has a road leading to

it, cut through a surface of loose stones and rock: the second is named *Gorse* Stone:* and the third, which is the largest, is called *Heart Stone,* and measures eighty-three feet in circumference. Several other stones of singular forms may be observed on different parts of the Moor; and particularly one called the *Andle Stone,* about a quarter of a mile eastward of Router rocks: this is nearly sixteen feet high, and appears to have been shaped by art.

Gorse Stone.

Heart Stone.

Andle Stone.

On the eminence above Matlock church, called Riber hill, are the remains of what has been supposed a Druidical altar, but which has more resemblance to a cromlech; though it may probably have only been intended as a point for the transmittal of signals. It is called the *Hirst Stones,* and consists of four rude masses of gritstone: one of which, apparently the smallest, is placed on the others and is computed to weigh about two tons. On the upper stone is a circular hole, six inches deep and nine in diameter, wherein, about fifty years ago, stood a stone pillar.

Hirst Stones.

On the declivity of a hill on Ashover Common is a rocking-stone, called by the country people *Robin Hood's Mark,* which measures about twenty-

Robin Hood's Mark.

six feet in circumference, and, from "its extraordinary position, evidently appears not only to have been the work of art, but to have been placed with great ingenuity."† About two hundred yards to the north of this is a singular shaped rock, called the *Turning Stone,* in height nine feet; supposed by Mr. Rooke to have been a rock idol.‡

Turning Stone.

* Archæologia, Vol. VI. page 113, 114. Mr. Rooke supposes this name to have been derived from the British *Gorsed-dau.*

† Archæologia, Vol. XII. page 43. ‡ Ibid.

CHAP. 6. On a waste piece of ground between Monyash and Arbor-low, about one mile and a half from the latter, is a huge block of limestone lying on the heath, and having a circular cavity on the top, which those who discover remnants of Druidism in every singularly shaped or hollow stone, would probably denominate a rock-bason. Its diameter is about nine or ten inches, and its depth eighteen or twenty. The interior is rugged and uneven; and has somewhat of the appearance of a corkscrew; though the hollows do not all run into each other. Scarcely a doubt can be entertained of this excavation being natural, though the particular cause of it cannot perhaps be assigned.

Rock-Bason.

Two large stones, now lying on the ground in the township of Ludworth, called by the inhabitants *Robin Hood's picking-rods,* formerly stood upright and were fixed into socket-stones. Near to them is a place called the Coombs, consisting of singular-shaped rocks.

Robin Hood's Picking-Rods.

In the eighth volume of the Archæologia, is an account, by Mr. Hayman Rooke, of some ancient remains on Hathersage moor, particularly of a *rocking-stone,* twenty-nine feet in circumference; and near it, a large stone, with a rock-bason and many tumuli, in which urns, beads, and rings have been found. At a little distance, he mentions observing another remarkable stone, thirteen feet six inches in length, which appeared to have been placed by art on the brow of a precipice, and supported by two small stones. On the top is a large rock-bason, four feet three inches in diameter; and close to this, on the south side, a hollow, cut like a chair, with a step to rest the feet upon. This, in the traditions of the country, is called *Cair's chair.* Not far from this spot are also some rocking-stones, "and of such a kind as seems plainly to indicate, that the first idea of forming rocking-stones at all, was the appearance of certain stupendous masses, left by natural causes in such a singular situation, as to be even prepared, as it were, by the hand of nature, to exhibit such a curious kind of equipoise."*

Rocking Stone.

Cair's Chair.

In a wood called Linda spring, near Crich, are two rows of round pits, called *Pit-steads,* one of them containing twenty-five and the other twenty-eight; and extending about two hundred and fifty yards in length: most of them being about fifteen feet in diameter and six feet deep. A particular account of them is printed in the Archæologia, Vol. X. page 114. communicated by Hayman Rooke, esq. who conjectured that it might have been a British town; there being no ore, coal, stone or clay, to be found here.

Pit-steads.

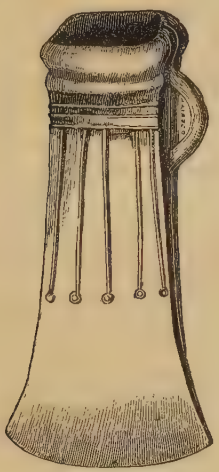
It is difficult to assign any particular era with correctness for those relics discovered in various parts of the county, denominated *Celts.* The accompanying plate, No. 1. is a celt, found in 1807, in the environs of Hope Dale, and is now in the possession of William Bateman, esq. F. A. S. of Middleton. It measures four inches and three-eighths in length, and weighs 11 oz. The one represented in plate No. 2. was found near Haddon hall, and is in the possession of D'Ewes Coke, esq. of Brookhill. This is a very perfect one, with a groove on each side, and ground to a fine edge. These instruments vary in shape, resembling chisels; their real use is unknown, but the opinions of learned men are more in favour of weapons than the other appropriations. Some authors have stated them to be the

Celts.

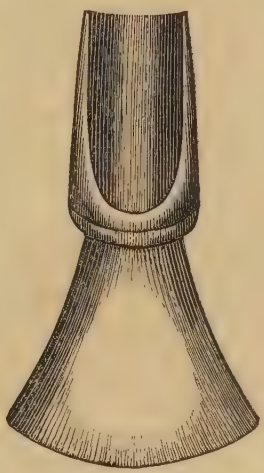
* Munimenta Antiqua, Vol. I.

heads of spears or walking-staves; others, chisels, used by the Romans for cutting and polishing stones. Whitaker stated them to be battle-axes; Stukeley, Druidical hooks for the misletoe; others, instruments for making the holes for tent poles, or for skinning animals. Fosbrooke says, they were manifestly tools for domestic use, and employed in chipping stone and other matters. Philip Gell, esq. of Hopton has one in his possession made of a peculiar kind of stone, which he supposes to have been a sacrificing instrument. We have also seen them of flint. The earlier kinds were inserted in wooden handles, the socket being of a later date. CHAP. 6. Celts.

Many of these celts have been discovered in Derbyshire, and on an analysis of their composition, by the Rev. J. Cumming, professor of chemistry at Cambridge, they were found to contain ten per cent of tin, being bronze, made of copper and tin. Some of these celts are, however, of other materials.



No. 1.



No. 2.

The Roman altar, found in the grounds belonging to Haddon hall, and now placed in the porch leading to the hall, is two feet eleven inches in height. The following inscription is now legible, only three letters being obliterated in the name of the person by whom it was dedicated, which may be supplied without difficulty, "*Deo Marti Braciacæ Os[i]tius Cæcilia[nus] Præf. Coh. I. Aquitano. V. S.*" Horsley supposes *Braciaca* to be the name of a place; Mr. Baxter and Dr. Pegge considered it as an epithet of Mars. The *cohors prima Aquitanorum* does not occur in Horsley's work, nor in the list of Roman auxiliary troops in the *Tabulæ Honestæ Missionis* of the Emperor Trajan, discovered near Sydenham and Malpas;* but it appears in that of the Emperor Hadrian,† found near Stainington, in the West-Riding of Yorkshire. Roman Antiquities. Roman Altar.

* Reliquiæ Rom. Vol. I. Part iv. plate 1, 2. † Gough's Camden, Vol. III. page 28.

CHAP. 6. British and Roman Roads.

"The county of Derby appears to have been of considerable importance, and to have contained a body of numerous and active inhabitants, in an early stage of British civilization; and the Romans, who carried on a very profitable trade with the produce of its mines, fixed stations and formed roads in every part of it. The Britons had certainly one of their principal roads, the Rykneld, running through its whole extent, from south-west to north-east, from the borders of Staffordshire to those of Yorkshire. The name is British, the R, according to Whitaker, being prefixed to distinguish it as the road of the Upper Iceni, while the Ikeneld way itself led towards Norfolk, the country of the Iceni, properly so called.

"The Caers or Carls work, near Hathersage, bears marks of British origin; it lies in the wildest part of the High Peak, near the present road from Manchester to Sheffield, and includes the summit of a hill, which is very steep on all sides but one, and defended on that by a wall of rude and singular construction, consisting of three rows of very large stones, with other stones placed obliquely upon them, pointing towards the assailants. The whole wall is above nine feet high, and supported within by a slanting bank of earth, twenty-five feet in length. See the plan, Archæologia, Vol. VII. page 175. The tombs and other remains of this early people have been found in every part of the Peak, and are evidently British, by the rude urns, flint weapons, beads and small mill-stones discovered in them, as well as by the absence of all such remains as mark a more polished æra of civilization.

"That the Romans, as soon as they were established in the island, paid considerable attention to this part of it, might be proved (even if there did not exist so many traces of their roads and towns) by the pigs of lead ready worked up for sale, and stamped with the name of the reigning emperor; no less than three of which have been found in the neighbourhood of Matlock, and one of them inscribed, "*Socio Romæ,*" (to my partner at Rome) which clearly marks it to have been an article of trade. Two of them are now in the British Museum, and the very inspection of these is sufficient to prove, they were thus prepared for articles of commerce; and not, as Camden and others have supposed, as trophies of victory over the *Ceangi* or other tribes. Mr. Pegge has conjectured, that one of these pigs bears so early a date as the time of the Emperor Claudius; and if this was the fact, it would go far to prove, that the mines in the Peak were worked by the natives before the time of the Roman invasion; as it is highly improbable, that in a short time after the landing of the Romans, they should have so far subdued the *Coritani*, in the central part of the island, as to have established their own works and workmen in this remote district; or if, as other antiquaries have contended, this lead formed part of the tribute paid by the islanders themselves (though not yet finally subdued) to the Roman Emperor, it would carry up the British trade in these metals to a very remote period.

"From the existence, however, of the trade, and the consequent population of the country, we may expect to find Derbyshire traversed in every direction by Roman roads; and such seems to have been the case. Two of these have been examined by Mr. Pegge with so much attention, as to leave us very little to add to his observations. The first of these, the

Rykneld street, or old British road, was repaired by the Romans for their own use. It is called by the name of the Rignal-street in an old Survey of Sir H. Hunloke's property in this county, as well as in those of other estates in Warwickshire and Staffordshire, where it is described as their boundary. It enters Derbyshire from this last county, over the Dove at Monk's bridge, and its crest is visible on Egginton heath, though much obliterated by the modern turnpike-road, which continues in its line as far as Littleover; where, a little before it reaches the two mile stone, the Roman road keeps its north-north-east direction, while the present one slants to the east towards Derby. The old road, though not easy to be distinguished in the cultivation so general near a populous town, crossed Nun's-green, and proceeded down Darley-slade to the banks of the Derwent, passing that river by a bridge (the piers of which may be felt in a dry summer) to the station of Little Chester, the *Derventio* of Richard, and placed by him at the distance of twelve miles from *ad Trivonam* (Berry farm at Branston-upon-Trent, to which it exactly answers.) It is by no means improbable, that the British Rykneld-street crossed the Derwent lower down at a ford, perhaps at the very place where Derby now stands; and then resuming its northerly course, would pass the east wall of the Roman town, as Stukeley has represented it in his map. The Roman road, however, on crossing the Derwent, seems to have passed the meadows near the north gate of the station, and after clearing the houses of the vicus, would fall into the Rykneld-street, near the north-east angle of the vallum, and proceed with it in its old line. The ground about the modern village of Little Chester being chiefly under the plough, the ridge of the road near it has been long destroyed; but on passing Breadsall priory on the left, and rising up towards the alms-houses on Morley moor, a large fragment of it is visible on the right hand: and again, though less plainly, on the moor itself, abutting on the fence about a hundred yards east of Brackley-gate. It next appears close to Horsley-park, a little west of the lodge, and is very high, covered with furze in the first enclosure; then passing through another field or two, crosses the road from Wirksworth to Nottingham, about a hundred yards west of Horsley-woodhouse; being quite plain in the enclosure south of the road called Castlecroft, and again in the field to the north of it. It now enters an old lane, which it soon quits, and may be seen in a field or two to the left, running down to a house called Cumbersome, which stands upon it; from hence, down another field, over Botolph (corruptly Bottle) brook, which it crosses straight for the Smithy houses, and enters a lane called, from it, the Street lane, where it is visible for more than a mile, as far as the water; here the lane bends to the east, while the Roman way keeps its old north-north-east bearing, up a field or two, to the lane from Heage to Ripley; this lane it crosses, and goes on to Hartey; from hence it points to the tail of Hartey-dam, and is visible in the hedge of the field near the miller's house. It now runs to Coneygree-house, crossing two lanes which lead from Pentrich town to the common, and so down to the water; leaving a camp, which is Roman by its form, and was probably a station, a very little to the left. It is again seen on the north side of the water, pointing up the lane to Oakerthorp, but enters the enclosures on the left, before it reaches the

CHAP. 6. British and Roman Roads.

village; and fragments of its ridge are quite plain in the croft opposite the manor-house.* On the other side of Oakerthorp the crest again appears in a line with this ridge, within the left-hand fence; it now runs to the four lane ends, over the ground on which Kendal's, or the Peacock-Inn stands, and Limbury chapel formerly stood; and where its gravel was dug up in laying the foundation of the summer-house. Traces of buildings, too, have been dug up in Ufton-hall field, on the other side of the road, but nothing certain is known about them. It here crosses the present road and enters the fields on the right, but re-crosses it again on the declivity of the hill, and is visible for a mile in the demesne lands of Shirland hall, called the Day-Cars, bearing for Higham. Hence, along the line of the present turnpike road to Clay-cross, through the village of Stretton; then to Egstow, (where is a large barrow) and is quite plain for three hundred yards, through some small enclosures (particularly in the Quakers burying-ground) and over a part of Tupton moor, near the blacksmith's forge; and in an old survey of Egstow farm, belonging to the Hunloke family, it is, as I have said, expressly described under the name of the Rignal street. From this spot, which is about twenty miles from Derby, it is no longer visible, but it points, when last seen, directly for the middle of Sir Henry Hunloke's avenue, and probably went from hence to Tupton-hill, near Chesterfield, which is in the same line, only three miles further, and where several Roman coins have been found, so that there seems good ground for supposing this town, as the name imports, to have been a station on the road, very probably the *Lutudarum* of Ravennas.† The country people have a tradition of the road going on still further to the north, and that after crossing the Rother near Chesterfield, it proceeded on the east side of that brook, passing on the west of Killamarsh church, and through the parish of Beighton into Yorkshire; but I am more inclined to think the Roman road continued exactly in its old bearing on the west side of the river, leaving Whittington on the left, through West-Handley and Ridgway to the Roman camp on the banks of the Don, while the old Rykneld street proceeds on the east side into Yorkshire.

"It is to be remarked, that this whole road is one of those omitted by Antonine, and mentioned, with the stations upon it, by Richard only; and that such a road did exist, after it has been thus traced by so judicious an antiquary as Mr. Pegge, it is impossible for any one to doubt. The case is the same with the roads in Scotland, described in Richard's ninth and tenth iters, which have been examined by General Roy and Mr. Chalmers, and with that in Yorkshire laid down in his seventh, which Dr. Thomas Whitaker, though he denies the authority of Richard himself, confesses to run exactly as he describes it. As these roads are not alluded to by Antonine in the slightest degree, while evident marks of them are found where Richard has placed them, I confess myself to be one of those who do not think it possible to dispute the authenticity of the materials he has collected.

* In this part of its course it leaves Alfreton (which some writers supposed it passed through, and have even called a station on it) without notice, nearly two miles on its right.

† The occurrence of the name of this station on the Roman pigs of lead found in Derbyshire, affords a strong confirmation of this conjecture.

The communications which we have received, containing additional information relative to these important traces of the abode of the Romans in this part are numerous, but we think that their substance is fully comprised in the two following letters—one from a respected correspondent at Eckington, and the other from a highly intelligent friend at Wingerworth.—The former letter alludes to remains which would have become antiquities had they remained undiscovered another century: they are interesting and well deserve the attention of the curious.—

Eckington, March 4, 1829.

Dear Sir,

I am ashamed your request relating to the Antiquities of this interesting corner of the county should have been so long neglected, but such information as I can furnish you with on this or any other subject is heartily at your service, and I only regret it is of so little value.—

You are aware the precise line of the Rykneld street (which on all hands is admitted to have been somewhere in this neighbourhood) has been a matter of dispute: and though as no vestige of the road itself remains, it may ever continue a matter of opinion; still a close attention to localities will enable us to come to something like proof that the line I will point out is the right one.

On Gilthwaite common, about four miles north from Beighton, when it was enclosed a few years ago, a square enclosure was levelled, and considerable quantities of spurs, stirrups and battle-axes were found by the labourers; and a pavement was exposed, into which were inserted posts, with rings attached, as if for the fastening of horses. And close to this spot an urn, of blue clay, was discovered in 1826, which contained many hundreds of Roman coins, chiefly of the reign of Constantine.

Following a line pointing through Eckington to Chesterfield, we come to the vestigia I showed you at Beighton, and which, coupled with the names of fields about there, as Stratfield, Battlefield, are strongly impressive that it is of Roman origin. From hence the road, I conceive, would traverse the site of the village of Beighton, and most likely that leading to Eckington is the same; but a little before reaching the latter village, it probably turned to the right, through what is yet called the Street-field, to the slope close under Mosbrough hall, where was a large square intrenchment, now very nearly obliterated by the plough, and crossed by the turnpike road to Sheffield. Its course would then be down the hill and across the rivulet; and a faint trace yet remains of its oblique ascent to a square intrenchment yet beautifully perfect, on the brow of the hill west of Eckington church. I am not aware of any more earth-works between here and Bolsover, but we have roads in the immediate vicinity clearly of Roman derivation, such as Ridgeway, Povey and Troway or Trovey; and that the Romans had at least a considerable station here, receives additional proof also, from the discovery of old hollows whence the coal had been drawn, and the number of large cinder-hills, whose origin is beyond the reach of tradition; and also from the discovery of a Terminus*, and occasionally of coins, which though of a more migratory character, furnish collateral proof.

I will mention also, that a tract of ground called the Hague common, not far from this village, was until its enclosure, some years ago, studded over with rude grave-stones, the origin of which nobody I have enquired of seems to know. I saw one, the last remaining unbroken, and it bore an inscription to the memory of John, Son of John and Mary ——, who died May ——, 1642. Tradition says, a battle was fought there in the great rebellion, and I think it probable, and that these tombs covered the remains of some who fell in it. Wishing you every success,

I am, Sir,

Yours truly,

To Mr. Stephen Glover, Derby. W. ASKHAM.

Wingerworth, May 25, 1829.

Dear Sir,

I have paid considerable attention to the Roman road in the parish of Wingerworth, as I have travelled about; and, as I believe, I have it in my power to point out its course between Derby and Chesterfield as accurately, if not more so, than most other persons, I will not merely confine myself to this parish, but trace its course the whole of the line between those towns.

After crossing the Derwent above St. Mary's bridge it goes to Little Chester, leaving that place a little to the north-west; it then bears more eastwardly for a short distance until it comes into

* *Vil agna festis cæsa Terminalibus, &c. Hor. Epod. Od.* 2.

At the feasts or wakes of the God Terminus, the ancients sacrificed to the God Termini as the preserver of the boundaries of each man's possessions.

CHAP. 6. British and Roman Roads.

the open fields; it then turns to the north, passing by Breadsall priory and over Morley moor, where it is quite visible, until it abuts against the fence of the old enclosure, one hundred yards east of Brackley gate; from thence it goes in a straight line for the lodge house in Horsley park, and crosses the road one hundred yards west of Horsley-Woodhouse; it may then be seen running down the field on the west side of the lane that goes down to Bottle-brook; it then keeps the lane, or nearly so, as far as Smithy houses; it is then quite visible for a mile or more along Street-lane, until you come to a water, where there is a turn in the lane towards the east, but the Roman road continues straight forward up the fields, and crosses the road from Heage to Ripley; from thence it goes to Hartshay Manor-house, crosses the tail of Hartshay dam, and goes up the fields, and crosses the lanes from Pentrich mill and from the wire-mill to the town of Pentrich, in a direct line for Coneygree house; from thence it runs down to the small brook, where it meets with the old Derby and Chesterfield road; it then keeps for a short distance up the said road to near Mr. Strelley's house at Oakerthorpe, where it gets into the field west of the road; it then runs down the fields on the back of the houses, crosses the brook, and goes to the bowling-green at the Peacock inn; it then keeps a little to the west of the road until you come to the Alfreton and Wessington road; it there crosses the Chesterfield road, and gets into the field on the east side: getting down the hill, almost to the brook, it joins the road again, and keeps along it (or nearly so) past Miss Hopkinson's, until you begin to rise the hill where the present road bears off to the east; but the Roman road goes straight along under the side of the hill to Higham town end; it then seems to keep the line of the present road through Stretton as far as Clay-cross; it then leaves the road on the west and goes to Egstow hall, and across the fields to the quaker's burying ground at Tupton; it then goes through the fields and crosses the Mansfield and Bakewell road at a farm-house in the occupation of William Hodgkinson; after passing through the orchard there, it keeps the line of the hedge, at one field distance (still on the east side of the road) for several fields in succession, crosses the avenue in front of Wingerworth hall, and still keeping a little east of the turnpike road until it joins it, half a mile before you come at Chesterfield town end.

This morning I walked, across the fields, the whole line or supposed line of the Roman road, from Clay-cross to Chesterfield. For the first half mile, until I came at an occupation lane, half a mile before I got to Egstow hall, I found little, if any remains of the road, the ground having been much cultivated and broken by getting coals and ironstone in this part. Having entered the said lane, it was quite visible for two miles, by Egstow hall and Tupton, as before described, until I got to the lane leading from Wingerworth to the mill, called mill-lane; after this I cannot say that I decidedly found any more traces of it.—I had several opportunities of seeing how the road was made, at places where the farmers had cut ditches across it, and it seems to be formed merely of such rubble-stone and sharp gravel as was nearest at hand.

I am, Sir,
Yours respectfully,
To Mr. Stephen Glover, Derby. JOHN GRATTON.

"The second Roman road in this county, which has been examined both by Mr. Pegge and John Whitaker (the historian of Manchester) runs through the north part of it, under the name of the Bathom-gate; it has been traced clearly from Brough to Buxton. On leaving the station of Brough in Hope parish, the Roman road is discoverable bearing south-west, as soon as it passes the second waterflash called the Burghwash, and fragments of its broad ridge may be seen in the lane. It then enters Bull-meadow, running up the hedge on the left, but soon appears again in the lane leading to Smaldale, where the right-hand hedge stands upon it. It then runs into the enclosures called the Doctor's pasture and Bagshaw pasture, and after crossing Gray ditch, bends north-west to ascend the hill, being found by the spade and plough, in a line well known to the farmers, till it comes upon the moor three quarters of a mile on the Brough side of Bathom-edge, where the crest is quite plain to the stone fence which separates Bradwell and Tideswell moors; retaining here its original breadth of eighteen or twenty feet, 'and sweeping,' as Whitaker describes it in his flowery language, 'in a long strait streak of vivid green over the purple surface of the heath.' It is also visible on the Buxton side of this hedge for about a mile, bearing south-west for the enclosures at the dam in the forest, and crosses the turnpike road from Manchester to Chesterfield, then

after just entering Hernstone lane, it is visible in the field on the left, where, in a dry summer, the grass is of a different colour; from hence it runs in a straight green lane towards Fairfield, being seen again on Fairfield moor, and is found by digging to have kept the same line to the hill above Buxton.

"The late Mr. King, who was better acquainted with our ancient castles than with our roads, was inclined to think that this road was only a communication between the bath at Buxton and the castle of his unknown chief upon Mam-Tor. That it might have been in use for such a purpose is probable enough, but the road itself is a common Roman one, bearing every distinguishing mark of being constructed by that people; and joining two of their most decided stations, Buxton and Brough, without appearing to be any way connected with Mam-Tor. Though it passes accidentally near it.

"At Buxton, as Mr. Watson contends, a third road from the Roman station at Manchester, fell into that we have just followed from Brough. This Manchester road coming from Stockport and Saltersford hall in Cheshire, where it is known by the name of the Old-gate, runs, according to his idea, by Pym-chair to the head of the river Goyte: here it is joined, as Whitaker also allows, by a Roman way from Chester, and proceeds on the west of the present turnpike road to Cracking-stones, and thence to the station at Buxton. Mr. Leman, however, (whose authority is of great weight) is rather inclined to suppose it continued more on the line of the modern road. The existence of the road itself is unquestionable.

"A fourth Roman way may be traced, as I before observed, on the south side of Buxton, in the direction of Little Chester. The Roman road leaves Buxton in the track of the present Ashbourn road, passes through Over-street, and near the 27th mile-stone, where, as the turnpike road bears off to the west, it keeps its own straight line, and is visible on the left hand of it, from Hurdlow house to Pike hall; being still called among the peasants by its proper name, the Roman road. It leaves Aldwark to the left, is visible on Brassington moor, passes close by Hopton, where the late Mr. Gell opened a part of it, and probably between Kedleston park and Duffield to Darley-slade,* where it joins the great road from *Ad Trivonam*, and crosses the river with it to Little Chester. It takes no notice of the camp at Parwich, though it has every appearance of being Roman, but leaves it about two miles to the right.

"Another considerable Roman road also meets this last on the banks of the Derwent, bearing directly east from Staffordshire, most probable from Chesterton near Newcastle, in that county (the *Mediolanum* of Antonine's and Richard's tenth iters.) It seems to have crossed the Dove a very little below Rocester, which, from its name and situation, was probably a station on it; and leaving Marston-Montgomery a little on the right, and Longford and Langley on the left, crosses the Ashbourn road to Derby, at right angles between the second and third mile-stones, in a direct line for the gates of Little Chester. It is known through the country by the name of the Long-lane, and its whole appearance is such as demonstrates to an

* Now called Penny-Long-Lane, probably from the Latin word *pene*, near; and the word slade may be supposed to be from *stadium*, or the first *station* from Little Chester.

CHAP. 6. British and Roman Roads.

antiquary, a Roman, or perhaps a British origin. After entering Little Chester, it issues from the present main street of the village, by what was probably the east gate of the station, and proceeds in its old line, leaving Chaddesden close on the right, through Stanton, into Nottinghamshire.

"Mr. Watson, in his very clear and excellent account of the station of Melandra Castle, in Archæologia, Vol. III. page 237, observes, that from the south-east gate of that fort, a Roman road went over the moors to Brough, the line of which, for a great part, is still followed, the old pavement in many places remaining, with drains cut through it when it crosses any marshy ground. It seems to have passed Glossop on the left, running between Cross-Cliff and Whitfield, leaving the great hill of Kinder-Scout to the south-west, and that of Crookston-close on the north-east, and bearing in a straight line through Aston, to the north-west entrance of the Roman station at Brough. It is curious enough, that in all this part of its course, it goes by the name of the Doctor's gate, that on the other side of Brough it enters a field called the Doctor's pasture: and that a road on the west side of Melandra falls into the great Roman way between Manchester and York, at a place which is termed the Doctor's-lane-head. The circumstance evidently points out a connexion between the three roads, which were indeed all certainly Roman.

"There are some traces of a road, said to be high raised, near Edinghall, on the south-west borders of Derbyshire, pointing to Lullington, and supposed to communicate with a more decided one near Tamworth and Drayton-Basset in Staffordshire. This last is a part of the Salters-way, from Droitwich into Lincolnshire; and the Edinghall road, if connected with it, would have a claim to be considered as British. It passes, however, through a very small space of this county, and will be traced more particularly in another part of the work.

"Nor have we much better information of what Nichols, in his History of Leicestershire, calls a bridle road from Derby to Coventry, and which he says is still frequented by the drovers as the best and shortest way between these towns. His informer (who gives a very confused account of it) says, it comes from Stanton, coincides in part of its course with the Salters-way, (which is next to impossible, as the bearings of the two are so different) and turning south, passes through Sibston, Atterton and Fen-Drayton, into the Watling street, about a mile and a half south-east of Mancester. From this statement, however, it is highly probable that there has been a Roman way in this direction, between Little Chester and the stations on the Watling street, which, turning south-south-west after passing the bridge at *Derventio*, might leave Derby, Osmaston and Swarkstone on the left, cross the Trent from the latter village about Stanton, and running near Staunton-Harold, Ticknal, Smithsby and Ashby-de-la-Zouch, proceed by Swebston and Congeston, crossing the Salters-way near the latter, and keeping its own line (and not turning as has been supposed) straight through Sibston, Atterton and Drayton, to the Watling street, near Mancester; especially as on the other side of this street, a way, undoubtedly Roman, proceeded in the very same bearing towards Mancester and Chesterton on the Fosse.

"Marks of a third of these uncertain roads are supposed to have been

British and Roman Roads.

seen on the east side of the Derwent, between Little Chester and Sawley ferry, bearing thence to the station at Leicester, or Willoughby on the Fosse; nor indeed is it likely that so important a place as Little Chester should have been without some communication of this sort on the side of *Ratæ*. In fact, this would be the continuance of the Roman road from Buxton in its original bearing.

"Having thus collected as much as is at present known of the Roman roads in this county, we come in course to consider the towns or stations on them.

Roman Stations.

Derventio or Little Chester.

At LITTLE CHESTER, the Roman *Derventio*, which stands on the east bank of the Derwent, about half a mile from Derby, there was a Roman town. Few vestiges of the ancient station are now to be seen; though Dr. Stukeley, who endeavoured to ascertain its form and extent in the year 1721, observes, that he "traced the tract of the wall all round, and in some places saw underground the foundations of it in the pastures, and some vaults along the sides." The station, he continues, "was of a square form, and the castrum five hundred feet by six hundred. Within the walls are foundations of houses; and in the fields round the castle may be seen tracts of streets laid with gravel." These observations of the Doctor's are considered as having been just and accurate; though, from the alterations made since the above time, no tracts of streets are now to be discovered in the pastures; and the only ways laid with gravel, is one, which running east and west, nearly intersects the station into two equal parts; and a second, which extends from the north-east corner in a direct line across the pastures towards Breadsall.*

The foundations of an ancient bridge, leading from Little Chester across the Derwent, may still, it is said, be seen when the water is clear.† Another circumstance, proving the remote origin of the station, is the variety of Roman coins that have at many different times been discovered here. They consist both of silver and copper; the latter so corroded and defaced, that the legends are mostly unintelligible; but the former in better preservation, and exhibiting, among others, the names of the following emperors: Tetricus, Galianus, Pictorinus, Posthumus, Vespatianus, Antonius Pius, Hadrianus, Marcus, Aurelius Antoninus, Crispina, Gordianus, Antoninus Augustus, Trajanus, and Carausius.

Roman Coins.

The Roman coins found at Little Chester are generally very much decayed, owing to their being found in the soil and turned up accidentally by the spade; still there is no doubt but a very extensive collection might have been formed, had care been taken of them. The following list is a few found at Little Chester.

SEVERVS AVG. PERT. MAX. rev. FVNDATOR PACIS. A female figure standing stolated and veiled, holding a dead branch in her right hand (arg. 54½ grains) AD 208.

L. SEPT. SEV. AVG. (the rest imperfect) rev. VICT. PARTHICA. Figure, Victory standing holding in her right hand a laurel, and in her left military trophies; at her feet a captive (arg. 37 grains.)

* Pilkington's View of Derbyshire, Vol. II. page 199.

† When Darley Grove was broken up, in the year 1820, skeletons, coins, and various Roman relics were discovered.

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†IMP. SEV. ALEXAND. AVG. rev. PM. TR. P. XII. COS. III. P. P. Figure, Mars gradiens, over his shoulder a mantle, the right hand extended, in the left a whip, the lash nowed (base silver, 49 grs.) AD. 222.*

†MAXIMINVS PIVS AVG. GERM. rev. FIDES MILITVM. Fig. standing holding in each hand a signum militare (arg. 43½ grains) AD 235–6.

IMP. PHILIPPVS AVG. rev. SAECVLARES AVG. G. in the centre a column, on which is COS. III. (arg. 56½ grains) A.D. 244–9.

IMP. PHILIPPVS AVG. rev. SAECVLARES AVGG. Figure, an antelope (arg. 48½ grains.)

IMP. M. IVL. PHILIPPVS AVG. rev. PM. TR. P. III. COS....P. P. Figure, a female standing stolated, in the right hand a spear, ending in a caduceus, in her left a cornucopia (arg. 46 grains.)

FL. MAX. THEODORA AVG. rev. PIETAS ROMANA. Figure, a female standing nursing a child in her left arm and holding her right hand on her breast, to the left of the figure is a cross patee; in the exergue T. R. P. (small brass) 292.

IMP. CARAVSIVS P. P. AVG. rev. MONETA. Figure standing holding a balance in her right hand and a cornucopia in her left. 3d. B. AD 293, 300.

IMP. CARAVSIVS P. P. AVG. rev. PAX. AVG. Figure standing holding in the right hand a branch, in the left a hasta, entwined with a serpent. 3 B.

Another the same, excepting that the figure holds a cornucopia instead of a hasta. 3 B.

IMP. CONSTANTINVS P. P. AVG. rev. PRINCIPI IVVENTVTIS. Figure, a warrior holding in each hand a signum militare, between the letters S. A. under his feet PTR. (2 B.) AD 306–337.

IMP. CONSTANTINVS MAX. AVG. rev. VICTORIAE. LARTAE PRINC. PERP. An altar charged with a star, over which two figures of Victory are holding a shield, inscribed VOT. PR. in the exergue STR.

IMP. CONSTANTINVS AVG. rev. SOLI INVICTO COMITI. Figure, Mars.

IVL. CRISPVS NOB. CAES. rev. BEATA TRANQVILLITAS. A votive altar, inscribed VOTIS XX. on the top of which is the globe of the earth, and above it three stars: exergue PTR. AD 318–326.

FL. IVL. CRISPVS NOB. CAES. rev. CAESARVM NOSTRORVM. Within a garland VOT. X. and exergue P SIS.

CONSTANTINVS IVN. NOB. C. rev. GLORIA EXERCITVS. Two signa militaria between two soldiers, each holding a scutum and pilum: in the exergue TRS AD 340.

Ditto, the letters in the exergue being TRP.

†Ditto, the letters in the exergue being SHANG.

DN. FL. CL. CONSTANTINVS NOB. C. rev. PROVIDENTIAE CAESS. In the centre a castle or wall with a gateway, and at the top three balls; exergue SMHE. AD 340.

CONSTANS P. P. AVG. rev. GLORIA EXERCITAS. On a signum

* Those marked thus † are in the possession of Mr. Lomas, the rest of Mr. Swanwick.

militare, the letter M between two warriors, each holding a scutum and pilum. AD 340.

CONSTANS P. P. AVG. rev. VICTORIAE D. D. AVGG. Q. N. N. A star between two figures of Victory, each holding a laurel, in the exergue TR. P.

Ditto, a heart instead of the star, and the exergue TRS.

Ditto, the letter M. } in the place of the heart or star.
Ditto, a tree }

FL. IVL. CONSTANTIVS NOB. C. rev. GLORIA EXERCITVS. Two signa militaria between two soldiers, each holding a scutum and pilum. The letters in the exergue not legible. AD 340.

Ditto, the letters in the exergue being SLC.

Ditto, with only one signum militare, charged with a patera, and the letters in the exergue CONST.

CONSTANTIVS AVG. rev. GLORIA EXERCITAS. One signum militare, charged with $\frac{P}{\chi}$ between two soldiers as before.

CONSTANTINOPOLIS rev. Victory standing on the prow of a ship, holding in her right hand a spear, and resting her left on a shield: exergue TRP.

VRBS ROMA rev. Lupa suckling Romulus and Remus; above two stars; exergue PLC.

Ditto, the letters TR. S.

Ditto, the letters TRS. with a star.

Ditto, with three stars above, and exergue S. CONST.

Ditto, a laurel between two stars above; exergue TRS.

FL. MAGNENTIVS P. F. AVG. rev. VICTORIAE D. D. N. N. AVG. ET CAE. Two figures of Victory supporting a shield, charged with VOT. V. MVLT. X. above it a symbol. AD 353.

Ditto, without the symbol, there are letters in the exergue, but not legible.

DN. MAGNENTIVS P. F. AVG. rev. GLORIA ROMANORVM. A soldier on horseback, in his right hand a pilum, in his left a scutum, riding over military spoil to strike an enemy who is thrown on his back and supplicating mercy; in the exergue AMB.—NB. Behind the head of the three last is the letter A.

Male Skeleton found.

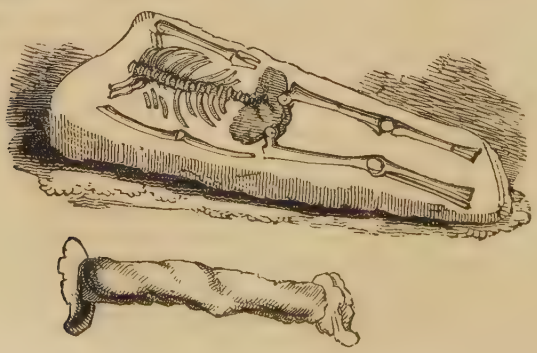
On the 16th of September, 1824, whilst the work-people of Mr. Harrison, engineer of this town, were digging for a foundation of a wall upon the green adjoining Little Chester, the greater part of the bones of a male skeleton were discovered, lying in a straight horizontal position, fifteen inches below the surface, with the head towards the north. The workmen destroyed the skull before they were aware of the existence of the skeleton, and the softer bones of the hands and feet had nearly mouldered away. From admeasurement of the bones which remained, the man must have stood upwards of five feet ten inches.

Iron rivets, much corroded, were found near various parts of the body and limbs, and thin strata of an ochre yellow, surrounding the trunk and extremities, situate an inch and a half from the bones; the colour of these strata was similar to that of the rivets, which, together with their situation, can leave but little doubt that the remains were those of a warrior buried in armour.

CHAP. 6 Male Skeleton found.

It has been thought by some not conversant with the subject, that the state of preservation of the bones prove them not to be of great antiquity. These ideas are decidedly incorrect. It may be well to give the opinions of the best antiquarians on this point, which are, that there are many instances on record where the skeleton of the ancients has been found preserving its primitive form, although not protected by any envelope. We may also allude to the antediluvian organic remains, a beautiful and well known instance of which lately appeared at Hopton, in this county, where the bones of the rhinoceros and other animals were found imbedded at a considerable depth in a moist earth.

Whether this was a warrior buried hastily, or interred with funeral rites, is a point difficult to decide; but there is a very interesting remark in Mr. Douglas's work, stating that the burial places of the Romans in this kingdom are very rarely discovered, owing to their custom of interring the dead at no great distance from their stations, by the side of the public road. This observation is given to show that the congregated inhumation of bodies was not by any means universal among the Romans, and it is no proof to the contrary even where a number of bodies have been found together under a barrow, as various works on the funeral tumuli of the Romans show, where Roman insignia have been found, the *cairn* or barrow was the sepulture of British warriors in the Roman service, as the barrow was not of Roman usage; but it must be recollected, when the Romans buried their dead with funeral obsequies, it was usually their custom to place sculptured devices or sepulchral inscriptions over the remains. As nothing of the sort was found, it favours the opinion of a man having been hastily interred in military accoutrements. With regard to the position, Sir R. Colt Hoare states, that the most ancient form of burial was with the head towards the north, which would probably be adhered to in ecclesiastical as well as military rites. Although this skeleton was surrounded by a clay very impervious to wet, which tended greatly to its preservation, still on exposure to the atmosphere, it was evident that the bones, which were fractured in many parts, would soon crumble away. An accurate cast was taken in plaster of Paris on the spot, whilst the specimen remained partially imbedded in the clay, by Mr. Douglas Fox, surgeon. The affixed plate is a diminished representation of the cast, and of one of the rivets, in its full size.



Roman coins have frequently been found in different parts of this county. In 1740, an urn, filled with *denarii*, was dug up at a place called Greenhaigh lane, in the parish of Alfreton. In 1748, fifteen or sixteen hundred *denarii*, chiefly of Trajan, Hadrian, the Antonines, and Sept. Severus, were found in a close, on a farm called New Grounds, in the same parish. In 1761, many small copper coins, of the lower empire, were found upon Crich Cliff, in the foundation of a small building of unhewn gritstone, ten feet square. About the year 1770, a great number of *denarii* were found in a place called Stuffins wood, in Pleasley. In 1778, an urn filled with coins of Diocletian, Constantine, &c. was dug up in Culland park.* In 1784, about seventy Roman coins, chiefly of Hadrian, Severus, and Constantine the younger, were found at Burton wood, about four miles from Ashbourn.† In 1788, an earthen pot full of Roman copper coins, was found upon Edge moor, in Crich common.‡

Roman Coins.

"Another Roman town was at Brough, in the parish of Hope. It stood in some fields called the Halsteads, in an angle formed by the junction of two brooks, Bradwell and the Noe, a situation which the Romans seem always to have chosen if they could possibly obtain it. It is of the shape also to which they gave a preference, an oblong of three hundred and ten feet by two hundred and seventy; three of the sides being still nearly perfect. Only one or two coins have been found: but urns, bricks, stone columns, foundations, one of a temple or other large building, and a tile with the remains of an inscription, COH. undoubtedly for *Cohors*, have been discovered; and two decided roads, as we have seen, certainly met there. The name is unknown, but the town is undoubtedly Roman.

Brough.

In the township of Gamesley, north of Charlesworth, are vestiges of an ancient station, called MELANDRA CASTLE, which, from its appearance, and an inscription found there, seems to have been Roman; though no writer, previous to the late Rev. Mr. Watson, has ever mentioned it as made by that people. The following is an extract from that gentleman's description, inserted in the third volume of the Archæologia.

Melandra Castle.

"It is situated, like many Roman stations, on moderately elevated ground, within the confluence of two rivers, and was well supplied with good water. Very fortunately the plough has not defaced it, so that the form cannot be mistaken: the ramparts, which have considerable quantities of hewn stones in them, seem to be about three yards broad. On two of the sides were ditches, of which part remains; the rest is filled up: on the other sides there are such declivities that there was no occasion for this kind of defence. On the north-east side, between the station and the water, great numbers of stones lie promiscuously, both above and under ground: there is also a subterraneous stream of water here, and a large bank of earth, which runs from the station to the river. It seems very plain, that on this and the north-west side have been many buildings; and these are the only places where they could safely stand, because of the declivity between them and the two rivers. The extent of this station is about one hundred and twenty-two yards by one hundred and twelve. The four gates or openings into it are exceedingly visible; as is also the foundation of a building

* J. Reynolds's Collections.

† Gent's Mag. for 1784. Part II. page 791. ‡ Archæologia, Vol. X.

CHAP. 6. within the area, about twenty-five yards square, which, in all probability, was the *prætorium.*"

Melandra Castle.

This fort was an oblong square, the angles facing the points of the compass, and the north-west and north-east sides having the river Mersey flowing within one or two furlongs of the walls. The wall encompassing the area was about three yards in thickness; that which bounded the prætorium, about one yard and a half. Within the area, pieces of broken swords have been found; and very near the east angle, a stone about sixteen inches long and twelve broad (now in the wall of a farm-house) was discovered, with an inscription on it in Roman characters, partly abbreviated. This Mr. Watson reads thus: *Cohortis primæ Frisianorum Centuria Valerius Vitalis:* and concludes, that Melandra was a sister fort to that at Manchester, which, he observes, was garrisoned by another part of the Frisian cohort. Eleven square pieces of enclosed ground, adjoining to this fort, are called the *Castle-carrs.*

Mouselow Castle.

On the top of a high round hill, one mile from Glossop, called *Mouselow castle,* there probably was formerly a castle or station, being a spot well calculated for such a purpose, as it commands a most extensive prospect over the surrounding country. This hill, forty-five years ago, was pastured to the top, on which it was plain to be seen a building had stood, there being deep holes and a quantity of stones. The top occupies a large space of ground. The whole of the hill, as well as the top, is now planted with firs of about forty-five years standing, and the late Hon. Edward Bernard Howard gave it the name of *Castle hill.*

"The last of our certain Roman stations was at Buxton, a spot known probably from very early antiquity for its warm springs; and evidently inhabited on this account by the Romans, several of whose baths have been discovered here, and one indeed so lately as 1781, in digging the foundations of the present Crescent. The station itself is supposed by Watson to have been on the hill above the hall, which is known by the name of the Stene or Stane cliffs. Major Rooke also, in 1787, found remains which he conjectured to be those of a Roman temple. From these circumstances, and still more from the meeting of at least three of their roads at the same point, there is little doubt of a Roman town having existed in this spot; and there is some foundation for supposing the name of it to have been *Aquæ,* not only as *Aquæ Sextiæ* in Provence, and *Aquæ Solis* or *Sulis* in Somersetshire, were names given by the Romans to places distinguished like this by their warm springs; but because in Ravennas (who observes an awkward sort of order in his geographical enumeration of our British towns) the Roman station of *Aquæ* appears not far from *Lindum* (Lincoln) on one side, and *Camulodurrum* (Slack in Yorkshire) on the other; a situation which agrees perfectly well with this of Buxton.

"The above-mentioned places have all of them, I believe, good claim to be considered as Roman; but there are two others, whose pretensions are

Parwich.

of a more uncertain nature. The first of these is at Parwich, between Buxton and Ashbourn. The camp, which is Roman in its shape, lies about half a mile from the village, at a spot called Lombard's green. Roman coins too have been found there, but in an urn, not scattered upon the surface, which last circumstance would have been decisive in its favour.

Foundations of walls have been dug up, and a bank, whether a *prætentura* or a road is uncertain, runs strait from it to the Ashbourn road on one side, and to a pool of water on the other. It must be owned that the names Lombard's green and Parwich *(Parvus Vicus)* might warrant the conjecture; and the distance, which is about half way from Buxton to Little Chester, would suit well for an intermediate station. But, with all these advantages, the distance of two miles and a half from the Roman road, and an apparent want of connexion with it, is an objection not to be got over. If, indeed, a way from Buxton to Rocester should be found in the direction of the present Ashbourn turnpike road, Parwich, being then in the space between two Roman roads, might have some right to be considered as a station to accommodate both; but until such a discovery is made, an antiquary of any experience must be inclined to suspend his opinion. Parwich.

"Another camp with a claim of the same nature is at Pentrich, on the Rykneld street, between Little Chester and Chesterfield: its figure also is Roman, being square with a double vallum. It lies close to the road; one coin at least has been found in it; and the distance suits well for a *mansio* between these two stations, being eleven or twelve miles from each. Indeed, the situation does not at all agree with Richard's present numbers; and this seems to have misled Mr. Pegge, who does not even notice its pretensions, but supposes the intermediate station would be found at Higham or Linbury, at the latter of which places, as I observed, foundations of old buildings have been discovered. But the numerals in Richard's iters, which are never remarkably accurate, are less so than usual in these roads, which he alone describes; being unchecked by those in Antonine, and only guessed at in his rude times by ignorant monks whom he states as his informers. And in this particular iter it is impossible to reconcile them either with one another or with truth; one station being inserted without name or numbers, and another with a number impossible to be right, being sixteen miles from Chesterfield, and more than that from *Derventio*. See Pegge, in Bib. Topog. No. 24. who quotes Bertram's edition of Richard's Iters. Pentrich.

Eboracum Legiolio, m. p.	XXI	
Ad Fines,	XVIII	
.....m. p.	XVI	Supposed Chesterfield.
.....	XVI	
.....	.....	
Derventione, m. p.	XVI	

"Now if we suppose the number left vacant to be as small as possible, for instance VII., the distance from Little Chester to Chesterfield, according to Pegge, would be thirty-nine miles, but by actual measurement it is only twenty-three. It is, therefore, far more rational, as Mr. Leman and Whitaker have agreed, to strike out the vacant fifth station, and alter the XVI on each side to XII, which in the first place would agree to the whole distance between Little Chester and Chesterfield, and in the second to the particular distance of Pentrich from both of them; though this last

CHAP. 6. Pentrich.

circumstance seems to have escaped Whitaker's notice. The *iter* would then stand thus:—

. ..... XVI Supposed Chesterfield.
..... XII Supposed Pentrich.
..... XII Little Chester.

"I should, therefore, without much hesitation, be inclined to rank the camp at Pentrich among the Derbyshire stations, as noticed by Richard in his 18th *Iter*.

"As to the Roman camp in the gardens of the village, which Pegge states as so plainly to be seen from the hill above Castleton in the Peak, it may have been either a summer camp for the garrison of Brough, or constructed here as a check to the old works on Mam-Tor, which King and others call Roman, but which I should rather suppose British, as we find circumstances exactly similar at Burrinswark in Scotland, and at the foot of the great British camp on Borough-hill near Daventry.

Comb's-Moss.

"The camp on Comb's-Moss, four miles from Buxton, which Major Rooke is said to have discovered, may in like manner have been a summer, or an exploratory camp to that station; but this antiquary was too apt to suppose all the camps he saw, however irregular in their shape, to be Roman, and he has not left us the slightest description of it to form our opinion on the subject."

At the distance of two miles, south-east of Chapel-en-le-Frith, are some works of a military appearance, near the northern extremity of a mountain called Combe's-Moss. On the level of the mountain are two deep trenches, which run parallel to each other to the extent of about two hundred yards. That which lies nearest to the edge of the hill is carried down the declivity by two traverses. This part of the intrenchment is much wider than the other, and is about a quarter of a mile long. We are not able even to form a conjecture respecting the people by whom these intrenchments were formed.

Silver Dish.

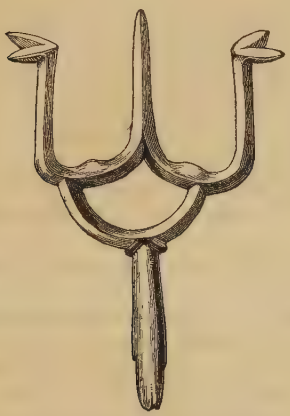
Near the site of the ancient manor-house, which stood in Risley Park, a large silver dish or salver, of antique basso relievo, and of Roman workmanship, was found in the year 1729. Dr. Stukeley, by whom an account of it was read before the Society of Antiquaries, observes, that it was twenty inches long and fifteen broad, and weighed seven pounds. Upon the face were a variety of figures, representing rural sports, employments and religious rites. It stood upon a square basis or foot; and round the bottom and on the outside, this inscription was rudely cut, with a pointed instrument, in Roman characters of the fourth century;

EXSVPERIVS EPISCOPVS ECCLESIÆ BOGIENSI DEDIT.

intimating, that it was "given by Exsuperius, who was Bishop of Bayeux and Toulouse in the year 405, to the church of Bouges;" near which a battle was fought in 1421, between the Scots, under the Duke d' Alençon, who were quartered in the church, and the English, under Thomas, Duke of Clarence, brother to Henry the Fifth, who was slain there. At this

time it is supposed to have been brought from the church as a trophy, and given to Dale Abbey.* CHAP. 6.

The Rev. Henry Peach, of Langley hall, has a good collection of Roman and British coins, and several gentlemen have Roman remains in their possession. Charles Hurt, jun. esq. of Wirksworth has a valuable collection of coins, fossils, &c. Philip Gell, esq. of Hopton has several Roman spear-heads, &c. The brass trident, found at Middleton in 1822, and the Roman fibula, found at the same village in 1821, represented in the engravings, are in the rare and valuable collection of antiquities of William Bateman, esq. F. A. S. of Middleton.



Trident.—Half the size of the original.

Fibula.—The size of the original.

There are many *Saxon camps* in this county: these are easily distinguished from those of the Romans. The Romans always took care to have a good supply of water, and placed their camps near a road, that the men might always be in readiness to march; but the Saxons generally fixed upon high hills, with a steep precipice in front, preferring security to convenience: the former generally chose a square spot of ground, the latter gave themselves no trouble about the form, but had recourse to ditches. Saxon Camps.

The Saxons brought into this island a kind of fortification which they called a *castle:* this was placed on a high hill, rendered difficult of approach, and was sometimes surrounded by a moat or ditch: it served as a residence for the chief, and a constant garrison being kept, such places were considered, before the use of gunpowder, a good security to their occupiers. Saxon coins have been found in the county. Mr. Swanwick of Derby has one in a high state of preservation.

Ancient Church Architecture.

Saxon.—Of the ecclesiastical edifices of Derbyshire, the crypt under the parish church of Repton claims the first notice; there being good reason to suppose, that it was a part of the conventual church, destroyed by the Ancient Church Architecture.

* Stukeley's Dissertations.

CHAP. 6. Ancient Church Architecture.

Danes, who wintered here at this place in the year 874; at which time Eadburga, daughter of Adulph, King of the East Angles, was abbess of Repton. There have been three entrances to this crypt by flights of steps, one on the north side, now open; and two on the west, which appear to have communicated with the church. It is nearly a square of seventeen feet, the roof being vaulted with circular arches, supported by four columns of less massy proportions than those of the later Saxon architecture, the capitals are very plain and square, the bases round, without any mouldings: the shafts are wreathed in different directions.*

Melbourn.

Melbourn church is a very perfect specimen of the massy style of architecture which prevailed in the eleventh century; a plan and sections of this church were published by the Society of Antiquaries, in the thirteenth volume of the Archæologia, from drawings by the late William Wilkins, esq., who conjectured that it was erected by King Ethelred, in the seventh century. We cannot but think that he has referred this edifice to too early a period, as its style by no means accords with that of the buildings, which, on the best evidence, are supposed to have been erected in the Saxon times; of which the conventual church at Ely, and the crypt at Repton, are those, whose dates are, perhaps, the best authenticated; but it coincides with that of the ecclesiastical edifices, which we know to have been built about the time of the Norman conquest.

Melbourn church has undergone little alteration, except in the lower range of windows, which have been enlarged; it consists of a nave and side aisles, separated by massy pillars, some of the capitals of which are ornamented with foliage and figures of animals, others with crosses: the arches are circular, ornamented with zig-zag mouldings. Between the nave and chancel is a large square tower, the upper part of which is more modern, with pointed windows; at the east end of each aisle is a chantry. The east end of the chancel and that of each of the chantries, Mr. Wilkins observes, appear to have been originally circular; they are now all square, with gothic windows. The entrance at the west end of the church consists of three porticos, with groined roofs, divided by arches from the nave, having chambers over them: Mr. Wilkins supposes these to be the *porticus* of the Saxon churches, described by Bede. The whole length of Melbourn church, within the walls, is one hundred and thirty-three feet, the width forty-four feet nine inches.

Steetley.

The desecrated church of Steetley exhibits a very complete specimen of the later and more enriched style of Saxon architecture, on a small scale. It is quite entire except the roof, and has undergone no alteration except in one of the windows on the south side, which has been enlarged. It consists of a nave and chancel, each twenty-six feet in length; the east end being circular and vaulted: the ribs of the arches, and the capitals of the half pillars, from which they spring, are much enriched with various mouldings, grotesque heads, foliage and other ornaments. A cornice, supported by brackets, ornamented with roses, heads, &c. runs round the upper part of the building on the outside. The circular part at the east end has also a fascia of foliage running round it, about the middle of the building; and

* See plate, given in the Parochial History, under the head of Repton.

is besides enriched with pilasters in the Saxon style. The arch of the south door-way is ornamented with zig-zag mouldings and heads; the shafts of the pillars are covered with sculptured foliage and other ornaments, in the style of the south door-way of Ely cathedral.

Considerable remains of Saxon architecture are to be seen in the churches of Alsop-in-the-Dale, Ashford, Bradburn, Bakewell, Bolsover, Boulton, Brailsford, Brassington, Clown, Darley, Heath, Hault Hucknall,* Hognaston, Kedleston, Killamarsh, Kirk Ireton, Long Eaton, Ockbrook, Parwich, Sandiacre, Stanton, Swarkstone, Tissington, Thorp, Whitwell, Longford, Willington, Winster and Yolgrave. The south door-ways of those of Ashford, Hognaston, Kedleston, Long Eaton and Swarkstone, have rude sculptures in bas-relief within the circular arch: of Bradburn and Whitwell churches, the towers at the west end are in this style of architecture. At the west end of Bakewell church is a large arch, very richly ornamented with Saxon mouldings and grotesque heads: on the sides of this arch are some remains of small interlaced arches.

Thirteenth century.—The specimens of the early gothic architecture which occur in Derbyshire are few, and by no means remarkable. The chancels of Bakewell, Marston-upon-Dove, and Doveridge churches are in this style, as is Breadsall church, which is a handsome edifice, with an embattled tower, supporting a spire at the west end. In the ruins of Stid chapel are clustered pillars with foliated capitals, and the windows which remain are lancet-shaped.

Fourteenth century.—Tideswell church is a large uniform building, in the form of a cross: the nave and aisles are separated by clustered pillars and pointed arches. At the west end is a tower, with four embattled turrets, terminating in pinnacles, ornamented with crockets. The altar-piece is of stone, enriched with two tabernacles; and on each side of the east window, over the altar, is an ornamented niche. John Foljambe, who died in 1358, and whose monument is in Tideswell church, is said to have been a principal contributor to the erection of that edifice. The chancels of Norbury, Dronfield and Sandiacre churches, exhibit fine specimens of this style. That of Norbury church has large handsome windows, with much of the original painted glass remaining in them.

Remains of the architecture of this century are to be seen in the churches of Mackworth and Marston-upon-Dove: there is a very elegant window, with a niche on each side, at the east end of the north aisle of Mackworth church; and in the north wall of the same aisle is an arch, with a richly ornamented canopy over it, between two windows. Spondon church is a handsome building in the style of this century.

Fifteenth and sixteenth centuries.—There are no remains of the ecclesiastical architecture of these centuries worthy of particular notice, except the tower of All-Saints' church at Derby, which has been generally and deservedly admired: it is about one hundred and fifty feet in height, and richly ornamented with gothic tracing; that of the battlements being pierced. On a *fascia*, running round three sides of the tower, is this inscription, in text hand—"Young men and maydens."

* Gentlemen's Magazine for 1779, part I. page 449.

CHAP. 7.

Painted Glass.

Painted glass.—There are some remains of painted glass in the churches of Ashbourn, Bradley, Dronfield, Egginton, Hault-Hucknall, Sandiacre and Sutton; but none of sufficient consequence to merit particular notice. In the churches of Morley and Norbury, the remains are considerable: those in the chancel of the latter are in a very good taste; and evidently coeval with the building, which is in the style of the fourteenth century.

Rood-lofts, Screens, &c.

*Rood-lofts, screens and stone stalls.**—In Ashbourn church is a very perfect rood-loft and screen, and at Ilkeston a stone screen of the rood-loft, in the style of the thirteenth century. In Chelmorton church is a stone screen, with quatrefoils at the top; and the lower part of one in Bakewell church. In Elvaston church is an elegant Gothic screen of the rood-loft; and in the chapel at Hayfield an entire rood-loft, the upper part of which is modernized, and has a modern painting of the crucifixion, and St. Mary, and St. John.

Stone Stalls, &c.

In each of the churches of Brailsford, Breadsall, Church-Broughton, Dronfield, Ilkeston, Langley, Longford, Sandiacre and Spondon, are three stone stalls, of equal height. Those of Dronfield and Sandiacre are richly ornamented, in the style of the fourteenth century, and there is a *piscina* adjoining each, in the same style. In Baslow, Denby and Whitwell churches, are two stone stalls: those at Whitwell are richly ornamented, in the style of the fourteenth century. In the chancel of Chaddesden church is a single stone stall, with a *piscina;* and a single one also in the north, and another in the south aisle of the same church.

Ancient Fonts.

Ancient fonts.—There are few of the Derbyshire fonts that are worthy of notice, except that in Ashover church, which is of lead, and apparently very ancient, being in the Saxon style: it is two feet one inch in width, and one foot in height; and is placed on a stone pedestal of more modern date. This font is ornamented with twenty figures of men, in flowing drapery, each holding a book in his left hand; and differing only in the position of the head, and of the right hand, which is more or less elevated in different figures: they are all very rudely executed in bas-relief, and stand under circular arches, separated by slender pillars. The fonts in Kirk-Hallam and Osmaston churches are circular: the former being ornamented with tracery of semicircular interlaced arches; the latter with tracery of circular arches and foliage. Those in Winster and Mellor churches are large and circular, ornamented with rude sculptures in bas-relief. Melbourn font is in the form of a basin, standing on four legs; that in Bakewell church is large, and in the gothic style, ornamented with figures, very rudely executed, in bas-relief.

The ancient sepulchral monuments, which occur in many of the churches, will be noticed in the Parochial History.

* The holy rood or rood-loft, derives its name from the Saxon word *rode* or *rood*, which signifies a cross. It was an image of Christ upon the cross, made generally of wood, and placed in a loft or gallery over the passage leading from the nave into the chancel. The nave without represented the church militant, and the chancel the church triumphant, and those who passed from one to the other must go under the cross and suffer affliction.

History of Churches in England, page 199.

CHAPTER VII.

Customs, games, superstitions, &c.

THE manners and customs of a district always bear some traces of antiquity; and notwithstanding the changes which society is undergoing in the course of every generation, the close observer may perceive a vestige remaining in the manners of the people indicative of the mode in which their ancestors thought and acted. Rush-bearing, or the covering the floors of churches with rushes, was formerly common in the northern districts of this county, and was undoubtedly a relic of Druidism, as on the days of sacrifice we find that the places consecrated to the worship of the ancient British deities were strewn with rushes. Our ancestors, a very few centuries ago, had rushes strewn on the floors of their apartments, as may be proved from various passages in our old comedies. It appears, however, that the custom of rush-bearing was confined principally to the mountainous region of the High Peak, and that since manufacturing industry has changed the manners of the inhabitants, and many elegant new churches have been erected there with modern conveniences, the custom has considerably declined. Mr. Rhodes, in his Peak Scenery, in alluding to this rural rite, has the following interesting passage. Rush-bearing.

"Previously to our leaving Glossop we visited the village church, a plain and lowly structure, and as little ornamented in the interior as it is without. Here we observed the remains of some garlands hung up near the entrance into the chancel. They were the mementos of a custom of rather a singular nature, that lingers about this part of Derbyshire, after having been lost in nearly every other. It is denominated *rush-bearing;* and the ceremonies of this truly rural fête take place annually, on one of the days appropriated to the wake or village festival. A car or wagon is on this occasion decorated with rushes. A pyramid of rushes, ornamented with wreaths of flowers, and surmounted with a garland, occupies the centre of the car, which is usually bestrewed with the choicest flowers that the meadows of Glossop Dale can produce, and liberally furnished with flags and streamers. Thus prepared, it is drawn through the different parts of the village, preceded by groups of dancers and a band of music. All the ribands in the place may be said to be in requisition on this festive day, and he who is the greatest favourite amongst the lasses is generally the gayest personage in the cavalcade. After parading the village, the car stops at the church gates, where it is dismantled of its honours. The rushes and flowers are then taken into the church, and strewed amongst the pews and along the floors, and the garlands are hung up near the entrance into the chancel, in remembrance of the day. The ceremony being ended, the various parties who made up the procession retire, amidst music and dancing, to the village inn, where they spend the remainder of the day in joyous festivity."

Mr. Farey, in speaking of the rush-bearing at Chapel-en-le-Frith, states,

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that it usually takes place, as he was informed, at the latter end of August, on public notice from the churchwardens, of the rushes being mown and properly dried, in some marshy part of the parish, where the young people assemble: the carts are loaded with rushes and decorated with flowers and ribands; and are attended to the church by the populace, many huzzaing and cracking whips by the side of the rush-cart, on their way thither, where every one lends a hand in carrying in and spreading the rushes. At Whitwell, instead of rushes, the hay of a piece of grass-land called the church close, is annually, on Midsummer eve, carted and spread in the church.

Well-flowering.

A very ancient custom called well-flowering still continues to be practised annually at Tissington. Holy Thursday is the day devoted to this very elegant rural ceremony. The day is held as a festival, and all the wells in the place, five in number, are decorated with wreaths and garlands of fresh gathered flowers, disposed in various devices. Sometimes boards are used, which are cut to the figures intended to be represented, and covered with moist clay, into which the stems of the flowers are inserted, to preserve their freshness. These flowers are arranged so as to form a beautiful mosaic work, often tasteful in design and vivid in colouring. The boards thus adorned are so placed in the spring that the water appears to issue from among beds of flowers. On this occasion the villagers put on their best attire, and open their houses to their friends. There is service at the church, where a sermon is preached; afterwards a procession takes place, and the wells are visited in succession: the psalms for the day, the epistle and gospel are read, one at each well, and the whole concludes with a hymn, sung by the church singers, and accompanied by a band of music. This done, they separate, and the remainder of the day is spent in rural sports and holiday pastimes.—This custom of well-flowering is undoubtedly of the highest antiquity. It was common to the Greeks and Romans. The ode of Horace to the fountain of Blandusia is well known.

O fons Blandusiæ, splendidior vitro,
Dulci digne mero, *non sine floribus*,
* * * *

The worship of the rural deities among the ancients was always connected with the decorating of springs and wells with flowers; and this has been beautifully alluded to by Fletcher in his Faithful Shepherdess, where the swains in worshipping Pan throw flowers upon the waters.

"All ye woods and trees and bow'rs
All ye virtues and ye powers
That inhabit in the lakes,
In the pleasant springs or brakes,
Move your feet
To our sound,
Whilst we greet
All this ground,
With his honour and his name
That defends our flocks from blame.
He is great and he is just,
He is ever good, and must
Thus be honoured. Daffodillies,
Roses, pinks and loved lilies,
Let us fling
Whilst we sing
Ever holy
Ever holy
Ever honoured, ever young!
Thus great Pan is ever sung."

In the earlier ages of poetry and romance (as Mr. Rhodes justly observes) wherever fountains and wells are situated, the common people are

accustomed to honour them with the titles of saints. In our own country innumerable instances occur of wells being so denominated. "Where a spring or a river flows," says Seneca, "there should we build altars and offer sacrifices." From this ancient custom, which has been continued through a long succession of ages, and is still in existence at Tissington, arose the practice of sprinkling the Severn and the rivers of Wales with flowers, as alluded to by Dyer in his poem of the Fleece and by Milton in his Comus. Well-flowering.

"———————— with light fantastic toe the nymphs
Thither assembled, thither every swain;
And o'er the dimpled stream a thousand flowers,
Pale lilies, roses, violets and pinks,
Mix'd with the green of burnet, mint and thyme,
And trefoil, sprinkled with their sportive arms:
Such custom holds along th' irriguous vales,
From Wreakin's brow to rocky Dolvoryn." *Dyer.*

"The shepherds at their festivals
Carol her good deeds loud in rustic lays,
And throw sweet garland wreaths into her stream,
Of pansies, pinks and gaudy daffodils." *Milton.*

A similar custom of dressing fountains with flowers has lately been either instituted or revived at Wirksworth, on account of the waters recently conveyed from the adjacent moor to the market-place and higher parts of the town, by means of cast-iron aqueducts. The taps of the pipes are adorned with chaplets and garlands, and the whole resembles very nearly the festivities at Tissington. The clubs of the town walk in procession, with bands of music, and a sermon is delivered at the church.

Sugar cupping is another of the remnants of ancient customs now running rapidly into disuse. On Easter Sunday, young people and children go to the Dropping Tor near Tideswell, with a cup in one pocket and a quarter of a pound of sugar* in the other, and having caught in their cups as much water as they wished, from the droppings of the Tor-spring, they dissolved the sugar in it. Sugar Cupping.

At Baslow, the rural festival of kit-dressing took place on the 4th of August, in the present year (1829) the procession was attended by the Baslow band, and the decorations of the kits surpassed in beauty and taste any that had ever before been seen. There were a great number of persons from the surrounding country, and even from more distant places, assembled to witness this rural fête, which gave unusual delight. On one of the kits was this inscription: Kit-dressing.

The farmer, the plough-boy, the fleece, and the flail,
Success to the milk-maid who carries the pail.

A beautiful garland and a large pink-coloured flag with emblems, were also carried in the procession. Twigs of willow were bent over the tops of the kits, and entwined with ribbons and flowers; and many fanciful ornaments of muslin and silk, mingled with trinkets of silver and gold

* If this custom has really any claims to antiquity, we must suppose that originally *honey* was used instead of *sugar*.

CHAP. 7. Kit-dressing.

composed the garlands, which were also formed upon a frame-work of willow twigs, interwoven together. The maidens of the village, attired in their best, carried the kits on their heads, attended by the young men. In the evening a happy company assembled at the Wheat Sheaf inn, where dancing and merriment concluded the day's festivities.

The miners have also their festivities. On the 13th of May they dress their cowes or coves (the places in which they deposit the ore) with oak branches, garlands and other rural decorations, which for one day at least, give these dreary spots a bright and benignant aspect. This is called the miners' holiday: a solid dinner of beef, pudding and ale is provided on the occasion, and when the weather permits, the whole of these festivities is conducted in the open air. The Bar-masters preside; music and old songs conclude the carousals of the day.

Churches and houses are dressed at the time of Christmas with evergreens in this county as they are generally in every part of England. Mr. Rhodes mentions the traces of a custom, which once prevailed in various parts of the kingdom, but which is now nearly obliterated. When unmarried women died, they were usually attended to the grave by the companions of their early years, who, in performing the last sad offices of friendship, accompanied the bier of the deceased with garlands, tastefully composed of wreaths of flowers, and every emblem of youth, purity and loveliness, that imagination could suggest. When the body was interred, the garlands were borne into the church, and hung up in a conspicuous situation, in memory of the departed. There is (adds Mr. Rhodes) something extremely simple and affecting in this village custom. In Hathersage church there were, when Mr. Rhodes saw the place, several of these memorials of early dissolution, but only one of a recent date.—In several of the churches of this county similar memorials are to be seen; and at Glossop, some years ago, it is asserted that a garland consisting of ribbons, artificial flowers, &c. cost the young men of the place no less than thirty pounds.

Funeral Garlands.

Mr. Pilkington, in mentioning the peculiar customs of the inhabitants of Derbyshire says, that in the liberty of the Peak Forest, when a person dies, it is customary to invite every family residing within the district, to attend the funeral, and a cake or a paper of biscuits is given to every individual who comes to the house of the deceased. The custom is somewhat different in the Low Peak. At Wirksworth and its neighbourhood, it is usual among the lower class of people to invite their relations and acquaintance, each of whom, according to his ability, contributes towards the expense of the funeral. When invitations are sent, enquiry is generally made, whether it is to be a free or a pay burial.

Funeral Invitations.

The village *wakes* or *feasts* are very prevalent seasons of festivity and amusement throughout this county. They begin on a Sunday, and continue through most, or perhaps all, of the ensuing week. Mr. Farey says that these rural festivals were thought by many well-informed persons with whom he conversed, to be rather beneficial than otherwise. A thorough cleaning of the cottage, and mostly a white-washing of its rooms, annually precede the wakes: the children and parents are then, if possible, new clothed: previous economy is exercised by most for accumulating the means

Wakes.

Wakes.

of providing meat, ale, &c. and various exertions are made on these recurring occasions, which tend to keep alive feelings and principles, which otherwise the poor-law system might utterly extinguish. Mr. Pilkington however observes, that at these times, it frequently happens that the lowest class of people by their festivity contract so large debts, that they are scarcely able to discharge them before the return of another wake. Thus, in consequence of their extravagance for a few days, they will become embarrassed and distressed throughout the remainder of the year.—Undoubtedly these festivities are frequently abused, but we incline to the opinion of Mr. Farey and his friends, that upon the whole, the good arising from occasional festivity and a little domestic pride among the poor, considerably counterbalances the evil.—In some villages, entertainments were formerly provided at the public houses; and the inhabitants, who are customers, might freely come and eat, without any charge, excepting for the liquor they drank; but this custom is now very little known.—The disgraceful sports of bull-baiting, badger and bear-baiting, cock-fighting and throwing, which were formerly very common at these wakes, are now falling into disuse.—Cocking and dog-fighting continue, we regret to say, to be too much practised, and specimens of the pugilistic art are occasionally exhibited at these festivities.

Whitsun Ales.

In Dodsworth's manuscripts, in the Bodleian library, there is the following record. "The inhabitants of Elvaston and Ockbrook were formerly required by mutual agreement to brew four ales, and every ale of one quarter of malt, and at their own costs and charges, betwixt this and the feast of St. John the baptist next coming. And every inhabitant of Ockbrook shall be at the several ales, and every husband and his wife were to pay two-pence, every cottager one penny, and all the inhabitants of the said towns of Elvaston, Thurlaston and Ambaston, shall have and receive all the profits and advantages, coming of the said ales, to the use and behoof of the said church of Elvaston; and the inhabitants of the said towns of Elvaston, Thurlaston and Ambaston, shall brew eight ales betwixt this and the feast of St. John the Baptist, at which ales, and every one of them, the inhabitants shall come and pay as before rehearsed, who, if he be away at one ale to pay at the t'oder ale for both, or else to send his money. And the inhabitants of Ockbrook shall carry all manner of tymber, being in the Dale wood now felled, that the said priest chyrch of the said towns of Elvaston, Thurlaston and Ambaston shall occupy to the use of the said church." This appears to be the ancient method of paying money for the repair of country churches.*

* The *Whitsun Ales* were derived from the *Agapai*, or love-feasts of the early christians, and were so denominated from the churchwardens buying, and laying in from presents also, a large quantity of malt, which they brewed into beer, and sold out in the church or elsewhere. The profits, as well as those from sundry games, there being no poor rates, were given to the poor, for whom this was one mode of provision, according to the christian rule, that all festivities should be rendered innocent by alms. Aubrey thus describes a Whitsun Ale. "In every parish was a church-house, to which belonged spits, crocks, and other utensils for dressing provisions. Here the housekeepers met. The young people were there too, and had dancing, bowling, shooting at butts, &c. the ancients sitting gravely by, and looking on." It seems too that a tree was erected by the church door, where a banner was placed, and maidens stood gathering contributions. An arbour, called Robin Hood's bower, was also put up in the church-yard. The modern Whitsun Ale consists of a lord and lady of the ale, a steward, sword-bearer, purse-bearer, mace-bearer, train-bearer or page, fool, and pipe and tabor man, with a company of young men and women, who dance in a barn.

CHAP. 7. Football.

Football continues to be played at in many parts of England on Shrove-Tuesday and Ash-Wednesday, but the mode of playing this game at Ashbourn and Derby, differs very much from the usual practice of this sport. In the town of Derby the contest lies between the parishes of St. Peter and All Saints, and the goals to which the ball is to be taken are, Nun's mill for the latter, and the Gallow's balk on the Normanton road for the former. None of the other parishes of the borough take any direct part in the contest, but the inhabitants of all join in the sport, together with persons from all parts of the adjacent country. The players are young men from eighteen to thirty or upwards, married as well as single, and many veterans who retain a relish for the sport are occasionally seen in the very heat of the conflict. The game commences in the market-place, where the partisans of each parish are drawn up on each side; and, about noon, a large ball is tossed up in the midst of them. This is seized upon by some of the strongest and most active men of each party. The rest of the players immediately close in upon them, and a solid mass is formed. It then becomes the object of each party to impel the course of the crowd towards their particular goal. The struggle to obtain the ball, which is carried in the arms of those who have possessed themselves of it, is then violent, and the motion of this human tide heaving to and fro, without the least regard to consequences, is tremendous. Broken shins, broken heads, torn coats and lost hats, are among the minor accidents of this fearful contest, and it frequently happens that persons fall in consequence of the intensity of the pressure, fainting and bleeding beneath the feet of the surrounding mob. But it would be difficult to give an adequate idea of this ruthless sport: a Frenchman passing through Derby remarked, that if Englishmen called this playing, it would be impossible to say what they would call fighting. Still the crowd is encouraged by respectable persons attached to each party, and who take a surprising interest in the result of the day's sport; urging on the players with shouts, and even handing to those who are exhausted, oranges and other refreshment. The object of the St. Peters' party is to get the ball into the water, down the Morledge brook into the Derwent as soon as they can, while the All Saints party endeavour to prevent this, and to urge the ball westward. The St. Peter players are considered to be equal to the best water-spaniels, and it is certainly curious to see two or three hundred men up to their chins in the Derwent continually ducking each other. The numbers engaged on both sides exceed a thousand, and the streets are crowded with lookers on. The shops are closed, and the town presents the aspect of a place suddenly taken by storm.—The origin of this violent game is lost in its antiquity, but there exists a tradition, that a cohort of Roman soldiers, marching through the town to Derventio, or Little Chester, were thrust out by the unarmed populace, and this mode of celebrating the occurrence has been continued to the present day. It is even added that this conflict occurred in the year 217, and that the Roman troops at Little Chester were slain by the Britons.—This game is played in a similar manner at Ashbourn, but the institution of it there is of a modern date. In Scotland,* it appears that there is an ancient game at

* "Sir Frederick Morton Eden, in the "Statistical account of Scotland," says that at the parish of Scone, county of Perth, every year on Shrove Tuesday the bachelors and married men drew

football which resembles the Derby football very closely.—A desperate game at football, in which the ball is struck by the feet of the players, is also played at Ashover and at other wakes. Football.

At Duffield wakes an ancient custom or right is kept up of hunting wild animals in the forest there. This is called the squirrel hunt. The young men of the village assemble in troops on the wakes Monday, some with horns, some with pans, and others with various articles calculated to make a great noise. They then proceed in a body to Kedleston park, and with shouting and the noise of the instruments, frighten the poor little animals until they drop from the trees and are taken by the hunters. After taking several in this manner, the hunters go back to Duffield, release the squirrels, and re-commence hunting them again in a similar manner. Squirrel hunting.

Hunting is a favourite diversion among the higher, middle, and even the lower classes of the present day, throughout the county.

On Easter Monday and Tuesday an ancient custom prevails at Buxton called *lifting*, as it consists in lifting a person in a chair three times from the ground. On Monday the men lift the women, and on Tuesday the women retaliate on the men. The ceremony ceases, however, at twelve o'clock each day. This is performed mostly in the open streets, though sometimes it is insisted on and submitted to within the house. The lifters, as they are called, go in parties, and, with a permitted freedom, seize the person whom they intend to lift; and having persuaded or obliged him or her to sit on the chair, lift whoever it is three times, with cheering, and then require a small compliment. The women's lifting-day, partaking more of the burlesque, is the most amusing. A little resistance, real or affected, creates no small merriment. The usage is a vulgar commemoration of the resurrection, which the festival of Easter celebrates. Lifting.

The throwing of quoits is a very prevalent amusement in many parts of the county. Skittle playing is also much practised. Games.

Cricket playing, bowling and billiards may be mentioned as forming part of the recreations of the middle and higher classes of society.

The afternoons and evenings of most of the fairs are devoted to amusement and jollity, among the younger people. When these form the principal concern of the day, and the stalls are chiefly furnished with ribbons, toys, cakes, &c. it is called a gig-fair. Shows, mountebanks, gipsies, and occasionally stage-plays are met with on these occasions. Fairs.

Races are held at Derby, Chesterfield, Buxton, Wirksworth and at Alfreton. At Derby the race-ground is on a fine open piece of land on the banks of the Derwent; and the race-stand is a very elegant and commodious building. There are stands, of handsome structure, at Chesterfield and Buxton. Races.

themselves up at the cross of Scone, on opposite sides; a ball was then thrown up, and they played from two o'clock until sun-set. The game was this: he who at any time got the ball into his hands, run with it until overtaken by one of the opposite party; and then, if he could shake himself loose from those on the opposite side who seized him, he run on; if not, he threw the ball from him, unless it was wrested from him by the other party, but no person was allowed to kick it. The object of the married men was to *hang* it, that is, to put it three times into a small hole in the moor, which was the *dool* or limit on the one hand: that of the bachelors was to *drown* it, or dip it three times in a deep place in the river, the limit on the other: the party who could effect either of these objects won the game; if neither won, the ball was cut into equal parts at sun-set. In the course of the play there was usually some violence between the parties; but it is a proverb in this part of the country, that "All is fair at the ball of Scone."

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Theatricals. There are four theatres for dramatic entertainments in the county; namely, at Derby, Chesterfield, Buxton and Ashbourn.—In most of the principal places there are assembly rooms, which will be more particularly mentioned in the accounts of the towns.

Archery. The amusement of archery has been introduced within the last ten years, by the nobility and gentry of the county. Meetings are annually held, during several weeks of the summer, at Chatsworth and Kedleston, and occasionally in the pleasure-grounds of the subscribers. Prizes are awarded to the successful archers, and the sport of the day usually concludes with a supper and ball.

Superstitions. The superstitions of this county resemble, for the most part, those entertained by the vulgar in other districts of England; but by the spread of information they are rapidly dying away. Formerly, in the Peak Hundreds, many of the miners believed that the motions of hazel-twigs, held in the hand, would indicate the situation of lead and other ore; and it was also thought that meteors appeared over such veins. This latter opinion may have had some rational foundation, but the uncertainty of such phenomena would suffice to render it very fallacious. It was also thought that the blooming of pease had some connexion with the fire-damp, but this and other similar superstitions are now completely exploded. We agree with Mr. Farey, that it would be generally beneficial if the Astrological nonsense which is still permitted, by the Stationers' Company, to occupy several pages of Moore's Almanac, were entirely expunged from a work which circulates extensively among the most ignorant and most credulous portion of the community.—It has been asserted that a strange belief in fairies still exists about Matlock, and in some of the romantic valleys; and it is possible that among such scenery superstition may continue to be very impressive, but we are certain that all such follies are on the decline. Some persons at Castleton are said to imagine that the sun dances up and down on Easter Sunday morning, when seen at its rising from Castleton hill; and even such a circumstance may be accounted for, by the natural laws of refraction, as the beams have to pass through various mountain mists, which offer different media for the light.—From the same cause the rainbows are vivid and more varied in the north Peak than in almost any other part of England.

Stocks. Sitting in the parish stocks is fallen entirely into disuse throughout Derbyshire; and yet, strange to say, the stocks are frequently repaired or re-erected. We suspect that some parish-job is the cause of this ridiculous custom being upheld.

Mole-catching, &c. Money is given to the mole-catchers in many villages for destroying moles; and we have seen an account for mole-catching at Etwall, which amounts on an average, for the last ten years, of more than ten pounds annually. For 1828, it was £11. 13*s*. 10*d*.—Sparrows and other small birds are caught by the boys and taken to the parish officers, who reward them at the rate of a farthing per head.

Parish pounds. The parish pounds for stray or trespassing cattle, are well built and regulated in most parts of the county. Many villages have their small local prisons or round-houses. There is a very good building of this sort at Ticknall, and we are happy in saying that these places of confinement

are so little useful, that at Shirland, the round-house is occupied as a cottage by a labourer and his family, as tenants to the parish.

General Manners.

The great commercial improvements at Glossop, Chapel-en-le-Frith and other parts of the Peak, have effected a great change in the manners of Peak within a few years; and the miners are, generally speaking, becoming a far more intelligent class of society than they were formerly. The following extract from Pilkington must therefore be taken with great allowances for alterations that have occurred since his time.

"Formerly the manners of the inhabitants of the northern and southern parts of Derbyshire were considerably different from each other. And this is still in some measure the case. It has been observed, that civilization does not take place so early in a mountainous as in a champaign country. This may, in some degree, account for the rude manners of those who live in the Peak of Derbyshire. But their general employments and pursuits have probably contributed in an equal degree to produce this effect. Having always been engaged in mineral concerns, and having but little intercourse with the rest of the world, they could not receive that polish, which a free and extensive commerce with neighbouring countries frequently gives. Nor could it be reasonably expected, that much refinement would arise from the regulations, by which they were directed in their general employments, more especially in prosecuting the business of the mines. The third act of stealing from the lead mines in Derbyshire, was by a law of Edward I. punished in the following manner. A hand of the criminal was nailed to a table, and in that state he was left without meat or drink, having no means for freedom, but employing one hand to cut off the other. The inhabitants of a country, which could require or even admit of such savage and barbarous laws, must be a long time before they could arrive at any high degree of civilization and refinement. They have now, from the introduction of manufactures amongst them, a more free intercourse with the world. The company who visit the baths and medicinal waters, and examine the other curiosities with which the county abounds, must also have some influence upon the minds of those with whom they converse. But there is no circumstance which has an equally powerful tendency to refine their manners, as the establishment of Sunday-schools. The effect which these institutions have already produced, in some situations, is very obvious. As the children of the present generation become better acquainted with their duty, they will improve in their reverence for God and religion, in kindness towards each other, in civility to strangers, and in the practice of modesty and decency."

Philip Kinder, in the preface to his intended History of Derbyshire, written about the middle of the seventeenth century, has the following observations relating to the character and modes of living of the inhabitants of Derbyshire. "The common sort of people, out of a genuine reverence, not forced by feare or institution, doe observe those of larger fortunes, courteous and readie to show the waies and help a passenger: you may say they are lazie and idle in a better sense, for (except the grooves) they have not whereon to set themselves on worke, for all theire harvest and sede tyme is finished in six weeks; the rest of their tyme they spend in fothering their cattle, mending their stone enclosures, and in sports.

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"The countrie women here are chaste and sober, very diligent in their huswifery; they hate idleness, love and obey their husbands, only in some of the great townes many seeming sanctificators use to follow the Presbyterian gang, and upon a lecture-day put on their best rayment, and hereby take occasion to goo a gossiping. Your merry wives of Bentley will sometimes look in ye glass, chirpe a cupp merrily, yet not indecently. In the Peak they are much given to dance after the baggpipes, almost every town hathe a baggpipe in it.

"Their exercises, for the greate part, is the *Gymnopaidia* or naked boy, an ould recreation among the Greeks: with this in foote-races, you shall have in a winter's day, the earth crusted over with ice, two antagonists, stark naked, runn a foote-race for two or three miles, with many hundred spectators, and the betts very small.

"They love their cards. The miners at Christmas tyme will carry tenn or twenty pounds about them, game freely, returne home againe, all the year after good husbands.

"For diet, the gentrie, after the southern mode, have two state-meales a-day, with a bit in ye buttery to a morning draught; but your peasants exceed the Greeks, who had four meales a-day, for the moorlanders add three more; ye bitt in the morning, ye *anders* meate and ye *yenders* meate, and so make up seaven, and for certaine ye great housekeeper doth allow his people, especially in summer tyme, so many commessations.

"The common inhabitants doe prefer oates for delight and strength above any other graine; for here you may find *jus nigrum*, the Lacedæmonian pottage, to be a good dish, if you bring a Lacedæmonian stomach. It is observed, that they have for the most part fair, long, broad teeth, which is caused by the mastication of their oat bread."

CHAPTER VIII.

General History of Derbyshire.

IT is difficult to separate the history of a county from that of the kingdom to which it belongs, and yet it is the business of the Topographer to select those events which have some bearing, either directly or indirectly, upon the district which he has undertaken to describe. In pursuing this course, he cannot but find matter particularly interesting from the very locality of the circumstances related; and if his narrative should sometimes want those connecting links that give a continuity to the records of national history, yet the facts of which he will have to speak must themselves be closely united with the surrounding scenery, and the agents in them may be frequently traced among the ancestry of the surrounding families. Throughout the following sketch, it has been the endeavour of the Editor to confine himself strictly to the History of Derbyshire, and to speak of the affairs of the kingdom at large, only when they or their immediate consequences may have had some influence on those of this county.

First Inhabitants.

We shall not presume to enter into any of the learned enquiries respecting the aboriginal inhabitants of this county, which, according to the earliest mention of it that can be traced, formed part of a district inhabited by the Coritani; a people, who, wheresoever they had their origin, had possessed themselves of that part of Britain which now comprises the counties of Derby, Nottingham, Lincoln, Rutland, Leicester and Northampton. In the Welsh or ancient British Triades, the *Coranied* is spoken of as the first of "the three usurping tribes that came into the island of Britain and never departed out of it." They are also said to have come from "the land of Pools," which various authors have understood to mean the coasts of Belgium. These invaders established themselves chiefly about the banks of the Humber, but it is not probable that they were ever completely masters of the mountainous tracks of Derbyshire, where it is manifest that the Druidism of the still earlier inhabitants of Britain long continued to flourish. It is true that the same rites were common to the Gauls, Germans and Britons, but the Bards and Druids of Britain were held in the greatest honour, and the youths of the other nations were sent hither for instruction. The Arbor-low or Arbelows, situated in the township of Middleton, and already described in our sixth chapter, is one of the existing monuments of this extraordinary priesthood, who undoubtedly taught the existence of a Supreme Being, intermingling their theology with much of the sciences of astronomy and astrology, while, at the same time, they exercised a powerful theocratic sway over the rude inhabitants of the land. There are similar Druidical remains in other parts of Derbyshire, though none in such excellent preservation as that near Middleton. These are supposed by many learned antiquarians, to have been places of council and courts of justice. "Here," says Mr. Pilkington, "the original inhabitants of the county met to deliberate upon the great concerns of the nation, in times of

Coritani.

CHAP. 8. war and peace. Here were likewise their seats of judgment for the trial and punishment of criminals."

Romans. The Romans first invaded Britain in the fifty-fifth year before the Christian era, but the inhabitants were far from being subdued until one hundred and thirty-four years afterwards, when the illustrious general Julius Agricola, by his repeated victories, finally established the dominion of Rome in Britain.

When the Romans first divided their conquest into provinces, the county of Derby was comprehended in that which was denominated *Britannia Prima;* and, subsequently, when a new division was made by Severus, in A. D. 207, the whole district which included the Coritani formed the eastern part of the province, called *Flavia Cæsariensis.*

The successes of the Romans facilitated the introduction of Christianity into Britain, and some Monkish writers, of suspicious authority, have asserted that Joseph of Arimathea preached at Glastonbury, during the first century, with considerable success. At the period of the Dioclesian persecution, which occurred about the year 303, it is certain that Christianity had made very great progress, and that the blood of martyrs flowed copiously in this island. What was the religious condition of this district is not known, but as the Romans had previously discovered the mineral wealth of our northern hills and valleys, and had made it an important article of export, there can be little doubt that many of the people of this neighbourhood had become acquainted with the doctrines of Christianity.

A commercial and friendly intercourse between the Britons and the Gauls had subsisted before the invasion of this island by Julius Cæsar, but the vessels of the natives were built with light timber and covered with hides, and, therefore, incapable of being used for the conveyance of heavy goods. This was speedily remedied under the government of the Romans, and Strabo asserts, that the exports of Britain were, at this time, corn, cattle and hides; gold, silver, tin, lead and iron; a variety of toys made of fish bone, resembling ivory; beads and pearls; slaves made captives by different tribes or by the Romans; and dogs which are said to have been of a remarkable species. We have mentioned the proofs discovered of the lead mines having been worked by the Romans.* Coins were made of the British metals, and many of these have been discovered in this county. Two hundred copper coins, principally of the Lower Empire, were discovered in a perforated rock, called *Scarthen nick,* near Cromford. Several of them are in good preservation, and are now in the possession of Charles Hurt, jun. esq. of Wirksworth. At Lombards' Green, the station near Parwich, about fifty years ago, a miner searching for lead, found about eighty coins; some of which were as high as the Triumvirate of Octavius, Marc Anthony, and Lepidus, and others as low as the Emperor Aurelius. At Little Chester a variety of coins† have been discovered; as it is probable (as this was the capital of the province Flavia Cæsariensis) that the Romans had a mint in this place. The Romans drew their revenues from taxes on commerce, and on the mines: from duties on legacies and houses; and from a capitation-tax. In order to obtain money by these imposts,

* See page 71. † See pages 293—5.

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the natives were taught the art of coining money, and thus the treasury of Rome was often replenished through the industry of the Britons.

Romans.

A succession of ages had almost identified the Britons with the Romans, when the latter emperors, pressed by difficulties at home, and weakened by the continual rebellions in the provinces, began to recall their troops from this island. The inhabitants, who had seen their sons and all the effective portion of the population drawn off for distant wars, implored the legions to remain, in order to protect them from the incursions of the Picts and Scots. The wall of Severus, which stretched across the island, from the Tyne on the east to Solway-Frith in the west, a distance of eighty miles, though built of solid stone, twelve feet high and eight feet thick, was no longer a sufficient barrier against the irruptions of these barbarians. The Romans departed, and the Britons invited over the Saxons to aid them against their invaders.

Saxons.

It does not enter into our plan to fill up our pages unnecessarily with the history of the various settlements of the Saxons in Britain, and of the formation of their seven kingdoms, which have been called the Heptarchy. The events which converted this portion of the Roman empire into so many Saxon monarchies, under different leaders, are sufficiently known to the general reader; and it is our business to confine our attention to that of Mercia alone, of which the county of Derby constituted one of the most important districts. It may here be proper to intimate, that when the Saxons arrived in this island, they were all pagans and idolaters. It was not until they had been established in their separate states for more than a hundred years that they began to be instructed in the Christian religion. About the year 597, Austin, a Benedictine Monk, was sent by Pope Gregory I. to convert the Saxons of Kent. In 653, the doctrine of the cross was taught in Mercia, by some Monks who had been protected and encouraged by the king of Northumberland.

Kingdom of Mercia.

The kingdom of Mercia (says Rapin) was bounded on the north by the Humber, by which it was separated from Northumberland: on the west by the Severn, beyond which were the Britons or Welsh: on the south by the Thames, by which it was separated from the kingdoms of Kent, Sussex and Wessex: and on the east by the kingdoms of Essex and East Anglia. Thus Mercia was guarded on three sides, by three large rivers, that ran into the sea, and served for a boundary to all the other kingdoms. Hence the name of Mercia, from the Saxon word *Merc*, which signifies a *bound*, and not, as some fancy, from an imaginary river, named Mercia. The inhabitants of this kingdom are sometimes termed by historians, *Mediterranei Angli*, or the Midland English; and sometimes South-Humbrians, as being south of the Humber; but the most common name is that of Mercians. The principal cities of Mercia were Lincoln, Nottingham, Warwick, Leicester, Coventry, Lichfield, Northampton, Worcester, Gloucester, *Derby*, Chester, Shrewsbury, Stafford, Oxford, Bristol.* Of all the kingdoms of the Heptarchy, this was the finest and most considerable. Its length was a hundred and sixty miles, and its greatest breadth about one hundred.†

* Rependun, now Repton, and nothing more than a small market town of Derbyshire, was the capital of the kingdom of Mercia and the burial place of its kings.

† Rapin, Vol. I. page 181.

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Crida.

Crida was the first king of Mercia. He was the tenth in descent from Whethelgeat, the third son of Woden. He landed in England in 584, and was crowned in the same or the following year. He was an illustrious prince, and reigned thirty-three years.*

Wibba.

After the death of Crida, an interregnum took place. Ethelbert, king of Kent, made himself master of Mercia, which he subsequently restored to Wibba the son of Crida, but reserved to himself some rights of sovereignty.—Wibba died in 615. He left a son called Penda, but Ethelbert placed Ceorl or Ceorlus, the cousin or nephew of Wibba, upon the throne.

On the death of Ethelbert, Ceorl delivered Mercia from the dominion of the Kentish monarchs. He died in 624, and was succeeded by Penda, the heroic son of Wibba. Before we proceed to the events of the reign of Penda, it will be proper to state that Edwin, afterwards king of Deïra and Northumberland, espoused the daughter of Ceorl, by whom he had two sons, Offrid and Edfrid. It was probably during the banishment of Edwin from his native dominions, having been expelled by Adelfrid, that he resided at the town of Derby, and that the following incident occurred, as mentioned by the venerable Bede. "While Edwyn lay at this place, Cuichelme, the king of the West Sax. sent a ruffian to kill him, hopinge by the trouble that should have ensued his death, to have formed himself a dore into his kingdome. This fellowe came with a venomed weapon to doe his office, and as he strake at the kinge, a nobleman espyinge it, caste himselfe yn danger to save his prince, and receyvinge the blowe through his bodye, was slaine forthwithe, and the kinge also somewhat hurte. It happened that Pauline, the byshopp, was then present, to whom for revenge the kinge promised that if God would give victorie against Cuichelme, that he would become a Christian man, which afterwards came to pass bothe in th'one and th'other, as Beda reporteth it."†—The principal protector of Edwin, while he was a wanderer, was Redowald, king of the East Angles; who was naturally generous, but fearful of irritating the monarch of Northumberland, came to the resolution of delivering up his guest, in order to avoid the consequences of war. The queen of Redowald favoured Edwin, and informed him of the determination of her husband. Edwin, upon this melancholy news from the queen, went and walked in the palace garden during the night, to consider of his affairs. Whilst he was deeply buried in thought, he saw a man, in a very strange dress, coming towards him, who asked him "What kept him thus awake, when all the world was asleep?" the prince answered, "He was surprised to see a stranger so inquisitive about the affairs of one that was unknown to him."—"Think not," replied the stranger, "that I am ignorant of what employs your thoughts: I know all that has befallen you to this hour, and am come to bring you consolation in your misfortunes. What now will you give to him that shall assure you of, one day, mounting the throne, and becoming the most powerful and glorious king that ever reigned in England?"—"If ever that happens," answered Edwin, "I will liberally reward all that shall have done me any service, as well as the person that foretells my good for-

Edwin of Deïra.

* The Saxon annals state that he died in 593; and place the date of his arrival in 560.

† This is thus given by the Rev. R. Simpson, from Lumbarde's Topog. and Histor. Dictionary of England.—Southey, in his History of the Church, gives this occurrence a later date.

tune."—"He, who is able and willing to raise you to this height of grandeur," continued the stranger, "requires nothing of you but to embrace his doctrine and obey his precepts."—"I should be a wretch indeed," replied Edwin, "should I refuse to be ruled by so true a friend."—Then the stranger, laying his hand on the prince's head, told him, "Remember what I am now doing, and when the like shall happen to you, think then of performing your promise without delay." Upon these words, the stranger disappeared in an extraordinary manner, to convince Edwin that there was something supernatural in this adventure.* The surprise of Edwin was increased by the arrival of a messenger from the queen, who informed him that Redowald had altered his mind. An army was raised, and the command of the first division was given to Reyner, the son of the king of the East Angles. The impetuosity of this youth greatly hazarded the success of the enterprise, and he was slain at the head of his troops. The other divisions advanced under the command of Redowald and Edwin, and the latter was shortly put in possession of Deïra and Bernicea, the two sovereign provinces of the kingdom of Northumberland. On the death of Redowald, in 624, Edwin openly aspired to the monarchy of the seven kingdoms, and his claims were disputed only by Cinigisil and Cuichelm, the joint monarchs of the West Saxons, who had recently obtained a signal victory over the Welsh; and battles were fought with various success in the mountainous tracks of Derbyshire, where the Mercian monarch aided the foes of Edwin; who ultimately obtained the object of his ambition, and was acknowledged to be the paramount prince of the Heptarchy. He then exerted an arbitrary power, but he testified considerable regard for Eabald, king of Kent, whose sister Ethelburga he desired to make his second wife. This princess united to great personal charms, talents and piety. She was a christian, and it was stipulated that she and her household should be allowed the free exercise of her religion. Edwin declared, that if, upon examination, christianity should be found more worthy of the Deity than the worship of the Pagan gods whom he and his forefathers had revered, he would embrace it. Paulinus, a missionary from Rome, who had previously visited Northumbria, accompanied the queen. The figure of Paulinus brought to the recollection of Edwin, the mysterious visitor who had laid his hand upon his head in the palace garden of Redowald; and one day when Edwin had retired alone, Paulinus entered the room, and placing his hand on the brows of the monarch, he asked him, in a solemn voice, if he remembered that token? Edwin started at this appeal, and fell at the feet of his sacred monitor. "Behold," said Paulinus, raising him up, "thou hast, through God's favour, escaped from thy enemies! Behold, through God's favour, thou hast recovered thy kingdom, and obtained the pre-eminence that was promised thee! Remember now thy own promise and perform it; so that He who hath elevated thee to this temporal kingdom, may deliver thee also from eternal misery, and take thee to live and reign with himself eternally in heaven!" Edwin hesitated no longer: he called his chiefs to council, that if they could be persuaded to think and believe as he did, they might be baptized at the same time.

* Bede, as quoted by Rapin.

CHAP. 8. Edwin of Deira.

The chiefs consented, and it was proposed by Coifi, the chief priest of Northumbria, that Paulinus should fully explain to them the nature of the new religion they were called upon to receive. Paulinus preached to them, and on the conclusion of his discourse, the chief priest declared that he had long been aware of the vanity of the Pagan mode of worship, and proposed that the altars and temples of their idols, with the sacred enclosures in which they stood, should be cast down and consumed by fire. He, instantly, demanded of the king, a horse and arms. Thus caparisoned he rode forth to the astonishment of the people, because in mounting a horse and bearing arms, he broke at once the ordinances of the sacerdotal office. He rode towards the principal temple, and desecrated it by throwing a lance within the enclosure. His companions, as he exhorted them, set fire to it. The scene of this memorable event was at a short distance east of York, upon the river Derwent, where stood a place sanctified by the pagan priesthood, and then called *Godmundingaham*, "the home of the protection of the gods." The village which stands upon the site is now called *Godmundam*. An oratory was straightway erected at York, upon the spot where now the minster stands, and there the king and his chiefs were baptized on Easter-day, A. D. 627.

Penda.

Penda, the fourth king of Mercia, had been set aside on the death of his father Wibba, by Ethelbert the monarch of Kent, who pretended that as the descendant of Hengist, the first Saxon settler in this island, he had a right to regulate the succession in the other states of the Heptarchy. Penda was a turbulent and an aspiring prince, but Eadbald, the successor of Ethelbert, had lost the supremacy claimed and exercised by his father, and Penda succeeded peaceably to the throne of Mercia on the death of his cousin Ceorl. But peace was never long enjoyed by any of the Saxon monarchies, and Penda is represented, in the monkish chronicles, as a restless disturber of his neighbours. One of his earliest expeditions was against Edwin, the king of Northumberland, at whose supremacy over the whole Heptarchy, the Mercian king was indignant. To strengthen himself, he formed an alliance with Cadwaller, king of Wales. The forces of the confederates advanced to Hatfield, in the West-Riding of Yorkshire, where they were met by an army under the command of the Northumbrian monarch, which was inferior in numbers to the invaders, but, being animated by the valour and conduct of Edwin, fought with a determination that for some time rendered the victory doubtful. A fatal incident deprived the king of Northumbria of his prudence. His eldest son, Offrid, while contending at his side was slain by an arrow, and the parent to revenge his death rushed instantly upon the troop of archers, and fell pierced with many wounds. With his life the Northumbrians lost the battle, and their country was left open to the ravages of the conquerors. Penda and his ally are said to have committed terrible devastations. Edfrid, the son of the ill-fated Edwin, dreading the greater barbarity of the Welsh sovereign, or hoping for mercy from a prince to whom on his mother's side he was closely related, surrendered himself to Penda. At first he was received with apparent kindness, but even his descent from the daughter of Ceorl, the predecessor of Penda, instigated his jealousy, and the young prince was put to death in the presence of Penda himself, by his command.

After remaining some time in Northumberland, Penda returned to Mercia, leaving Cadwaller in possession of the conquered territory. The Welsh chieftain continued long to devastate the country, until at length the Northumbrians, aroused to resistance under the command of Oswald, one of the sons of Adelfrid, the predecessor of Edwin, assembled in great force, and obtained a complete victory over Cadwaller, who was slain in the battle. But, as Oswald, after delivering his country from the barbarous dominion of its invaders, began to aspire to the dignity enjoyed by Edwin as supreme sovereign of the Anglo-Saxons, the rage of Penda was again excited, and he once more turned his arms against Northumbria. Oswald, eager to subdue the pride of the Mercian monarch, and probably to intercept any aid which Penda might expect from his Welsh allies, marched into the western part of Mercia as far as Oswestry, where Penda encountered him with a very superior army and obtained a signal victory. Oswald was slain, and his body being found on the field of battle was inhumanly ordered by his barbarous conqueror to be quartered and hung upon stakes. Penda after his victory entered Northumbria, and besieged Bamborough, but meeting with more resistance than he expected, and hearing of the unsettled state of East Anglia, he suddenly withdrew his troops from the north.

The kingdom of East Anglia contained the two counties, now called Norfolk and Suffolk, with part of Cambridgeshire. After the death of Redowald, who was the most illustrious of the East Anglian sovereigns, the monarchy became unsettled, and Sigebert, the son of Redowald, having been banished by his brother, was converted to Christianity in France. On his accession to the throne, he zealously laboured at the promulgation of the christian doctrine among his subjects, but wearied with their obstinacy and their commotions, he retired into a monastery, leaving the crown to his cousin Egric, who was scarcely crowned when he was attacked by Penda, the powerful king of Mercia. To resist this sanguinary invader an army was speedily assembled, and Sigebert was entreated to quit his retirement and lead it to victory. Under a strong persuasion that he had obtained the favour of heaven, in which he was encouraged by the priests around him, he joined Egric, bearing in his hand a sanctified wand instead of a spear, and clothed in his monastic habit in place of armour. The battle commenced with enthusiasm on the part of the East Anglians, but the Mercians, accustomed to victory under their warlike leader, repelled the assault, and covered the field with the devoted corses of their assailants. A dreadful slaughter left Penda master of East Anglia, both its monarchs being among the slain; but the attention of this turbulent prince was suddenly called to the kingdom of Wessex, a state of the Heptarchy which occupied the whole territory between the Thames and the Channel, and from the borders of Kent and Sussex to Cornwall. Cenowalch, its king, had married the sister of Penda, and during the contests of the Mercian monarch, he had, upon some pretence, divorced her. Immediately after his victory over the kings of East Anglia, Penda marched his forces into Wessex, making the wrongs of this sister the occasion of his sanguinary ravages. The resistance he met with was firm, and for some months Cenowalch maintained himself against his invader. During that period the East An-

CHAP. 8. Penda.

glians had raised Annas, a warlike prince of the blood-royal, to the throne. From Annas, alliance and assistance was sought by the king of Wessex, but before the East Anglians could march an army to his succour, Cenowalch was compelled to leave his kingdom; and Penda, at the head of his victorious Mercians, again invaded East Anglia. This war seems to have been attended with various success, and Penda, during a period of several years, kept possession of Wessex. At length a battle was fought, in which the East Anglians were totally defeated, and their king Annas, together with his eldest son, was slain, leaving the kingdom of East Anglia once more in the power of the Mercian conqueror.

But while Penda had thus been engaged in subjugating and desolating Wessex and East Anglia, his ambitious spirit had never lost sight of the kingdom of Northumbria, two of whose sovereigns had already fallen by his arms. This state, as has been already mentioned, was divided into the kingdoms of Bernicia and Deïra. When Penda withdrew his troops from Northumbria, Oswy, the brother of the fallen Oswald, was elected king by the Bernicians, but the people of Deïra chose Oswin, the son of one of their former princes. The latter was devout and peaceable, and when attacked by Oswy he privately withdrew himself from the army, and was seeking refuge in a monastery, when he was betrayed by one of his thanes into the hands of Oswy, who ordered him instantly to be put to death, and endeavoured to seize the throne of Deïra. His cruel ambition was disappointed. Adelwald, the son of Oswald, and nephew of Oswy, took the command of the Deïrian army, and was made sovereign of Deïra, but sensible that he was inferior both in arms and policy to his uncle, who, notwithstanding his cruelties, contrived, by founding monasteries, to retain the favour of the priesthood, he sought an alliance with the king of Mercia. At that time Penda was master of East Anglia; he was seventy-eight years of age, and his long life had been passed in the turbulence of military achievements, which, debased as they were by the barbarous manners of the period, proved that he possessed, in an eminent degree, the qualities of intrepidity and skilful conduct. He listened eagerly to the overtures of Adelwald, and commanded Ethelric, whom he had permitted to succeed his brother Annas, as king of East Anglia, to furnish him with money, and to accompany him in his expedition against Northumbria.

The king of Deïra had requested such succours only as might enable him to withstand the designs of his uncle Oswy; and when he saw an immense army, headed by two princes, one of whom was a veteran conqueror of insatiable ambition, he began to regret that he had been instrumental to this invasion of his country. He, however, increased his forces, and made a show of advancing to welcome his allies. Oswy, in the meantime, prepared for a contest which threatened his destruction, and while he called upon the people to arm themselves, he secured the influence of the priests by a vow, that if he obtained the victory, he would build and endow twelve monasteries, and consecrate his daughter to the service of the church. He then marched with hallowed banners to meet the allied forces, which were posted upon some hilly ground upon the banks of the river Aire, near the place where the town of Leeds now stands. The Mercians under their veteran monarch commenced the battle, and were seconded by the East

Anglians; but as soon as Adelwald saw that the combatants on both sides were completely engaged, he drew off his Deïrians from the field, determined to reserve his troops for the defence of his own dominions, against whichsoever party might be the victor. The Mercians perceiving this defection on the part of the prince, for whose protection they had entered the country of their enemies, lost their usual energy and began to give way, particularly as some doubts of the fidelity of the East Anglians had arisen among the soldiery. In vain their aged commander reminded them of their former victories and endeavoured to recall them to their duty. The king of the East Anglians was slain, and his troops were dispersed. Penda rallied a portion of his Mercians, but it was only to perish at their head; and thus fell in battle this veteran warrior, who, during his victorious career, had seen three sovereigns of East Anglia and two of Northumbria end their lives and yield him victory, as he now did himself before the king of Bernicia. He was undoubtedly a prince of great talents, but as he resolutely remained a pagan, he was no favourite with the Monkish historians, to whom we are indebted for the history of that age. His barbarities are not to be defended, but they were equalled by christian princes, his contemporaries, whom these writers have extolled for their many virtues, and some of whose names are to be found in the calendar of saints. Penda aimed at the subjugation of his neighbours, and this seems to have been the leading principle of the policy of that period. The three great kingdoms of the Heptarchy were Northumbria, Mercia and Wessex, and we have found Penda, with the forces of Mercia, master at different times both of the first and the last.—Penda left behind him five sons: Peada, Wulfer, Ethelred, Merowald and Mercelm; and two daughters, Ciniburga and Ciniswintha.

CHAP. 8. Penda.

The victory obtained by Oswy was complete, and he resolved to avail himself of all the advantages it offered him, by marching immediately into Mercia. He found it defenceless; and, seizing upon the whole realm, he placed it under a sort of military jurisdiction, giving up the principal towns and districts to the discretion of his thanes. After this conquest, the paramount sovereignty of the Heptarchy was conferred upon him, and for a few years he enjoyed this coveted supremacy and extent of dominion. In the meantime all the sons of Penda, except the eldest, sought refuge in the other principalities of the Heptarchy. Peada had, during the life-time of his father, espoused one of the daughters of Oswy, and Penda had erected the small district of Leicester into a sovereignty, which he conferred upon his son, with the title of king. During the temporary residence of Peada at the court of Bernicia, he had embraced the christian doctrines, and on his return he was accompanied by missionary monks, who preached with considerable success the christian religion in various parts of the Mercian dominions; and, although the aged monarch did not embrace their faith, he seems to have taken no measures to prevent the promulgation of that religion among his subjects. The small kingdom of Leicester, in particular, had, in a short space of time, become full of proselytes, and, on that account, Peada, for two years after his father's death, enjoyed the countenance of the conqueror. But the people of Mercia, aroused by their sufferings, looked for a leader by whose valour and talents they might be

Peada.

CHAP. 8. Peada.

enabled to throw off the Northumbrian yoke. Peada then became an object of jealousy to his father-in-law, and he is said to have died by poison administered to him by his christian wife. His death rather enraged the Mercians, than deprived them of all hopes of recovering their independence, and Wulfer was invited by the thanes of Mercia to assume the crown. Wulfer had distinguished himself in many battles under the command of his father, whom he resembled in person, ambition and the spirit of enterprise. He secretly headed the conspiracy, and so well were the measures of the insurgents concerted, that the officers of Oswy were taken by surprise, and the Northumbrians were, almost in one day, driven out of every part of Mercia. The names of the chief Mercian conspirators were Immin, Eada and Eadbert. The foundation of the cathedral of Lichfield was laid while Oswy was in possession of the government of Mercia.

Wulfer.

Wulfer or Wulferus, the second son of Penda, was an heroic prince, but the monkish historians differ from each other considerably in narrating his exploits. It is probable that his success was various. Soon after his accession to the throne, he appears to have been at war with Cenowalch the king of Wessex, who sought an opportunity of avenging himself for the defeats he had sustained by the Mercians under Penda. Much of Mercia was laid waste by the troops of Cenowalch, and Wulfer was made prisoner. A change of fortune, however, speedily occurred. Wulfer, escaping from captivity, became the invader, and defeated Cenowalch at Aston near Wallingford. Pursuing his success he conquered the kingdom of Sussex, and sent Adelwalch, the sovereign of that state, prisoner to Mercia. Wulfer was an idolater when he came to the crown, but was shortly after converted; and having become urgent for the dissemination of the christian doctrines, he bestowed upon his prisoner Adelwalch the Isle of Wight, which he had taken from the king of Wessex, as a baptismal gift, to induce that prince to become a convert. Wulfer for some time held possession of the kingdom of Essex, a state jointly ruled by two princes, one of whom was a pagan and the other a christian; and, as paramount sovereign of that division of the Heptarchy, he bestowed the bishopric of London upon a priest named Wina. It was in the reign of this monarch that the noble monastery at Repton was founded, and placed under the direction of an Abbess. The monastery was, according to the ancient custom of the Saxons, a receptacle for devotees of both sexes, and there is reason to believe that the first Abbess was Vereburga, the daughter of Wulfer. Ermenilda, daughter of Ercombert, king of Kent, was the wife of the Mercian monarch, and through her persuasions he was converted to christianity. He died in the year 675, but although he left a son, named Cenrid, he was succeeded by his brother Ethelred, who was probably at first at the head of the pagan party, notwithstanding his subsequent devotion.

Ethelred.

Ethelred was also a warlike prince. He invaded Kent, and was victorious against Egfrid of Northumbria, from whom he recovered some towns on the confines of Mercia, having defeated that monarch and slain his brother in a battle fought on the banks of the Trent. Ostritha, the wife of Ethelred, was assassinated in a journey through Mercia, and the king himself was suspected to have been the instigator of this murder. Shortly after its perpetration he became melancholy and recluse, and as an act of

mortification, he divested himself of the ensigns of royalty, resigning his crown to his nephew Cenrid, whom he had supplanted. CHAP. 8.

Kenred or Cenredus.

Kenred or Cenredus, the son of Wulfer, is celebrated for his piety. In his reign Offa of Essex visited Mercia, with the intention of espousing Ceniswintha, the daughter of Penda, and consequently the aunt of the reigning sovereign. This princess was nearly fifty years of age, and by her persuasions both her lover and her nephew were persuaded to become monks, and to make a journey to Rome, there to receive the tonsure from the hands of the pope. Ceolred, the son of Ethelred, succeeded his cousin Kenred.

Ceolred.

Ceolred was a brave and warlike prince. He sustained a long and dreadful conflict with Ina, one of the most illustrious monarchs of the West Saxons, but the monkish historians have not narrated the particulars of this war. It appears, however, that the Mercian king had invaded Wessex, for a sanguinary battle was fought in the year 715, with equal loss on both sides, at Wodensburg* in Wiltshire. In his own dominions, Ceolred opposed with firmness the encroachments of the ecclesiastics, and by so doing he incurred the hatred of the monks, who have represented him as a reprobate and a blasphemer. He died in 716, and was succeeded by Ethelbald, the grandson of Eoppa or Koppa, a brother of the heroic Penda.

Ethelbald.

Ethelbald was a brave and distinguished sovereign. He is described by Ingulphus, as being elegant in form, strong in body, and warlike in mind, but proud of heart and immoderately rash in his conduct. He fled from the persecutions of Ceolred, and with a few followers concealed himself in the fens of Lincolnshire, and there sought consolation and advice from the anchorite Guthlac, who had previously been the object of his veneration. The holy man (says Ingulphus) listened to his griefs, revived his hopes, and as an interpreter of the divine oracle, opened to him the course of futurity, and promised to him the submission of his family, the destruction of his enemies, and the sovereignty of his people: that these things would come to pass without battle or bloodshed, and that he might confidently await them as instances of the divine power. At the same time he admonished him, in these words—"Acknowledge the Lord your God, and fear him above all things: studiously venerate the holy church: frequently lament the evil consequences of your sins, and constantly maintain the purpose of a good life: so may you expect the certain aid of the Lord, if you bring into his presence, as an offering, the merit of a good work." Ethelbald felt his spirits so renovated by these words, that instantly, in the presence of Guthlac and of his own followers, he declared with his lips what he had conceived in his heart, that when he should obtain the peaceable government of the Mercian kingdom, he would undertake the foundation of a monastery in that very place, to the praise of God, and the honour of his reverend father Guthlac. This he subsequently, effectually and devoutly performed. A short time after this occurrence, Ethelbald, still a banished man, wandering and concealing himself in remote regions, having been informed of the death of the venerable anchorite, hastened to the spot sorrowing and lamenting. To him there appeared, while still sleepless in

* Now called Wanborough.

CHAP. 8. Ethelbald.

a neighbouring hovel, where he had passed many hours in tears and prayers, the sainted hermit; who, comforting him, said, "Have faith, my son, and be not sorrowful; for the Lord God, at my intercession hath heard your prayers, and before the present year shall have completed its circle, you shall in happiness possess the sceptre of this realm, and shall enjoy dominion during a lengthened period of your days." And Ethelbald replied, "Father, what sign dost give unto me, that these things shall come to pass?" and the saint answered, "In the morning, before the third hour, food unexpectedly will be given to those now inhabiting this island of Croyland."—Henceforward, treasuring up these things in his mind, he firmly believed that the events would happen according to his wishes: nor did his confidence deceive him, for every thing was fulfilled to him in conformity with the prophecy of the man of God.*

Whatever credibility may be due to the prophetic spirit of the anchorite Guthlac, it is certain that no sooner had Ethelbald ascended the throne than he founded the monastery of Croyland,† the charter of which bears date, 716, which was the first year of his reign. On this charter, as Ingulphus remarks, the first signature after those of the bishops is that of Ethelred, Abbot of Bardeney, who twelve years before had exchanged his crown for the cowl. He died the same year, at a very advanced period of life.

It seems probable that Ethelbald was advanced to the throne by the ecclesiastics, whose privileges and possessions had been greatly violated by his predecessor. He is, nevertheless, accused of exorbitant pride by many of the old annalists, and he does not appear to have been a monarch of a very submissive character. Early in his reign he obtained the paramount dignity of sovereign of the Heptarchy, which Ina, the powerful king of Wessex, had resigned on devoting himself to a monastic life. For many years he carried on a war against the two succeeding kings of Wessex, but in 744, he made peace with the West Saxon monarch Cudred, and in confederacy with him successfully invaded the province of Cornwall, which was still possessed by the Britons.‡ Ethelbald had previously defeated the Welsh, and according to Beda, all the provinces of England, together with their princes, were subjected to his power. The jealousy of the monarchs of Wessex and Northumberland was then excited, and they formed a league for his overthrow. They invaded his territories, the latter from the north, and the former from the south, at the time that the internal peace of the realm was disturbed by the faction inimical to the priesthood, by whose influence he had hitherto held the crown, and whom he had greatly provoked by his proud demeanour; so that he was compelled to divide his forces. Cudred of Wessex had recently repressed a rebellion headed by Atheldun, one of his thanes, who was strongly adverse to the ecclesiastical faction, and had again taken that intrepid leader into his favour. Cudred placed Atheldun at the head of that portion of his army

* Ingulphi Hist. page 2.

† This abbey was founded at great expense. "And because Croyland, as its name indicates, was marshy ground (says Ingulph) and would not support a stone building, the aforesaid King Ethelbald caused innumerable piles of oak and alder to be driven into the swampy land, and quantities of strong gravelly earth to be brought from Upland, seven miles by water, in barges." *Ingulp.*

‡ Chronica de Mailros.

who were to engage the king of Mercia, and as the battle was fought at Burford, in Oxfordshire, there is little doubt of Ethelbald's having been at first successful. The king of Mercia was aided by a body of Kentish warriors, and the priests of Canterbury were in his army, together with auxiliaries from East Anglia, where the ecclesiastical power was in its greatest strength. Ethelbald was nevertheless defeated: his forces were put completely to the rout, and he fled, almost unattended, to Repton, in Derbyshire. We have little account of the war on the side of Northumbria, but we may glean from the very meagre relations of the monkish historians, that Ethelbald, after his return from Wessex, carried on a boundary war, and in frequent incursions obtained considerable booty. The adverse party was, in the meantime, gaining strength, and they were headed by a valiant and ambitious thane, named Beornred. The revolt of the Mercians became extensive, and a battle was fought at a place called Secandune, now Seckington, in Warwickshire, in which Ethelbald was slain and his army completely defeated. "Beornred," says Ingulph, "truly a tyrant, did not long enjoy the exercise of his tyranny, but perished in the same year. Ethelbald, the respected monarch, was buried at *Ripadium* or Repton, at that time a celebrated monastery, and was succeeded by Offa, the lineal descendant from Wibba, with the unanimous consent of the thanes of Mercia."*

CHAP. 8.

Ethelbald.

Beornred.

Beornred for a short time was supported by the insurgents, but his nomination to the throne was displeasing to the majority of the Mercians, and he was slain in an engagement with Offa.

Offa was young when he was called to the sovereignty of Mercia, but he proved himself both warlike and politic, and during his reign the kingdom of Mercia attained its greatest extent of dominion. The first fifteen years from his accession were employed by Offa in quelling the factions and quieting the animosities which, during the preceding hundred years, had greatly distracted the kingdom. He conciliated the ecclesiastics by founding the monastery of Black Monks at St. Albans, and by confirming the charter of Croyland Abbey,† while he overawed the turbulent by his circumspection and firmness. We find no mention of his military exploits until the year 771, when he is said to have subjugated the Hestingi,‡ a people concerning whom there has been much conjecture among the learned. In 774 he invaded Kent, and in a battle which was fought at Otford on the Darent, near Shoreham, and which was dreadfully sanguinary on both sides, he obtained a complete victory, and reduced Aldric, the sovereign of that kingdom, to the severest straits. The jealousy of the other princes of the Heptarchy prevented Offa from pursuing his advantages, and his attention was called to other wars. In the year 777 he defeated Cenulph, king of Wessex, at Bensington in Oxfordshire, and soon after made an alliance with the vanquished monarch, and gave his daughter Eadburga in marriage to Brithric, the son of Cenulph. Offa also obtained many decisive advantages over the Northumbrians, but while he was engaged in thus endeavouring to acquire a supremacy over the other Saxon monarchies, the Welsh made an inroad into Mercia and carried off a large quantity of

Offa.

* Ingulphi Hist. page 5.

† In 781, Offa granted lands to the church of St. Mary at Worcester, and in the grant he styles himself *Dei dono Rex Meciorum.*

‡ Chronica de Mailros.

CHAP. 8. Offa.

cattle, having laid waste the country to a vast extent. At the approach of Offa the Welsh retired, and he compelled them to relinquish to him that part of their own territory which lies between the Severne and the Wye. This track of land he peopled with Saxon soldiers and their families, whom he ordered to throw up a rampart, defended by a large ditch, by means of which he separated his conquests from the rest of Wales. This rampart, which is in length about four and twenty miles, extends from the mouth of the Dee to the junction of the Wye with the Severne, and was called Clawdh Offa, or Offa's dyke.*—In the year 785, Offa associated his son Egfrid with him in the government; and about the same time, considering it to be inconvenient and derogatory to his dignity, that the bishops of Mercia should be subjected to the Archiepiscopal See of Canterbury, he resolved to elevate Lichfield to the rank of an archbishopric; and, with some difficulty, he obtained the concurrence of the Pope in his purpose.

The second daughter of Offa, named Elfleda, was married to Ethelred king of Northumbria. Adelfrida,† his third daughter, was rendered the unconscious means of a crime which has cast a horrible blemish upon the conduct of this mighty sovereign. Ethelbert, the young king of the East Angles, a prince of great bodily and mental endowments, sought an alliance with his powerful neighbour. He solicited the hand of Adelfrida, and came, as an acknowledged suitor to her father's court, which was then held at Mordon or Morchampton in the neighbourhood of Hereford. Preparations were made for the nuptials, when, on the evening preceding the day appointed for the marriage, the expectant bridegroom was suddenly conveyed into one of the cells of the palace, and there assassinated. It is said that Offa was instigated to this treacherous deed by Kendrida, his queen, whom he afterwards shut up in a nunnery; but instead of abjuring this violation of the sacred laws of honour and hospitality, he immediately took means to profit by it, and, marching a numerous army into East Anglia, he seized upon that kingdom and united it to Mercia. Whether Offa experienced the anguish of conscientious remorse for this atrocious deed, may be doubted, notwithstanding his subsequent submission to the priesthood, his donations to the church and his pilgrimage to Rome. The monasteries of that period always benefited by the crimes of princes. Offa obtained complete absolution from the papal see, and secured the praises of the Saxon monks by his donations. His liberalities at Rome were magnificent. He gave 365 mancas,‡ to be disposed of by the pope. Ina, the king of the West Saxons, had previously founded a college at Rome for the education of English youth, and had ordered a penny to be collected yearly of every family throughout his dominions. Offa extended this tax to Mercia and East Anglia. In the course of time it began to be called Romescot, or Peter's pence, and the popes pretending that it was a tribute paid by England to St. Peter and his successors, converted it to their own use, until it was abolished at the Reformation.—But the piety of Offa did not diminish his ambition or his warlike activity. On his return from Rome he was surprised by a fresh irruption of the Welsh, who

* Rapin. † Sometimes called Edeldritha and Elfrida.
‡ A Manca is a coin, worth about six shillngs.

had demolished part of the rampart and filled up the ditch he had caused to be made on their boundaries. They penetrated as far as Hereford, but Offa speedily levied an army and repulsed the invaders. He followed them, and obtained a decisive victory over them, in which the king of North Wales was slain. After the battle, with a barbarity not unusual at that period, Offa put to death all his prisoners.*—About two years before the death of this powerful prince, the Danes made their first descent with considerable force upon the coast of Northumberland. They burnt Lindisfarn monastery, and encouraged by their success they returned the next year, and having pillaged the monastery of Tinemouth, they greatly extended their ravages. Ethelred requested the aid of Offa, his father-in-law, who sent his victorious troops into Northumbria. The Danish invaders were driven back to their ships, and many of them perished in a sudden and violent storm on the English coast. CHAP. 8. Offa.

Offa died in 796, after a reign of thirty-nine years, and was buried in a chapel near Bedford, which has since been destroyed by the inundation of the river Ouse. He left a son and three daughters. His eldest daughter, Eadburga, to the cruelty and resolution of her mother Kendrida, added dissoluteness of character. She poisoned her husband, Brithric, king of Wessex, and with the plunder of his treasury fled to France. She had been the accuser, the seducer and betrayer of worthy men.† When in the presence of Charlemagne, that monarch said to her, "Take your choice, whom will you have, my son or me?"—She, amorously inclined, chose his son, because he was the younger, and thus lost the protection of both. The king, however, made her a present of a monastery, and there, under the hypocritical mask of sanctimonious apparel, she carried on a criminal intercourse, with a vulgar fellow of her own country, who had been the companion of her flight. She was apprehended and ejected from the monastery by the command of the king; and afterwards wandered as a wretched outcast, begging bread along the highways and at the gates of castles, until she expired, destitute of every means of subsistence, in the streets of Pavia.‡—The second daughter of Offa was named Elfleda. She was married to the revengeful tyrant of Northumberland, Ethelred, who suffered for his atrocious abuses of power by the enmity of his subjects.—Etheldritha, after the murder of her lover, the youthful sovereign of East Anglia, assumed the veil at Croyland, and lived to an old age, in a state of penitence which was greatly aggrandized by the calamities of her family.

Under the reign of Offa, the kingdom of Mercia attained its greatest extent. On the north it continued to be bounded by the Mersey and the Humber; while on the east it reached to the German ocean and the fens of Cambridgeshire. Its southern limits were the Thames and the Avon. On the west, the Dyke of Offa divided it from Wales. Within these limits were included the counties of Chester, Derby, Lincoln, Leicester, Rutland, Huntingdon, Northampton, Warwick, Stafford, Hereford, Worcester, Shropshire, Bedford, the southern part of Nottingham, and the

* The memory of this tragic event has been transmitted to the present time in an old Welsh melancholy air, called Morfa Rhuddlan, which may be found in E. Jones's collection of Welsh music.

† Bonorum semper accusatrix, alteri paratum et datum porrexit. *Chronica de Mailros.* ‡ Ibid.

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greater part of Middlesex and Hereford, were his original dominions. The higher parts of Nottingham, to which the princes of Northumbria pretended to have some claims, were conquered by Offa, who wrested from Wessex the counties of Oxford and Gloucester. From the Welsh he obtained part of Flint, Denbigh, Montgomery and Radnor. The kingdom of East Anglia, comprising Norfolk, Suffolk and Cambridge, he also united to Mercia. He thus possessed the absolute sovereignty over twenty-two counties, and the predominance over the whole Heptarchy. It has been already mentioned that Offa erected Lichfield into an archbishopric: he also framed or compiled a body of laws, denominated the laws of the Mercians, a great part of which were subsequently inserted in the laws of King Alfred.—The name of Offa was respected by foreign princes, and an intimate degree of friendship existed between the Mercian sovereign and Charlemagne of France. Some letters of these two monarchs to each other are still extant.

Egfrid.

Egfrid, the only son of Offa, who had been associated with his father during many years, in the government, possessed the sole dominion of Mercia only five months. His latter days were passed in severe bodily sufferings, during which he enriched the monks and made great benefactions to the monastery of St. Albans.

Kenulph.

Kenulph succeeded Egfrid, and possessed not only the Mercian crown but the paramount sovereignty of England. He was the fifth in descent from Kenwalch, the younger brother of the heroic Penda. In the second year of his reign he invaded Kent with a formidable army, and having laid waste the country, he took prisoner Edbert, surnamed Pren, the sovereign, whom he carried captive to Mercia. Kenulph caused the eyes of the Kentish prince to be put out, and declaring his kingdom tributary to Mercia, he placed on its throne his own natural brother Cuthred. As Canterbury was now become a part of his own dominions, Kenulph had little reluctance to restore to that archiepiscopal see, its former jurisdiction over the bishops of Mercia and East Anglia. He did this at the instigation of Athelard, a prelate of great address, who pointed out to the Mercian king that this would be the best means to reconcile the people of Kent to his sway. Kenulph wrote a letter to the pope, accompanied with a present of 120 mancas, which he sent by Athelard. Leo III. then pontiff, was highly gratified by the application, and in his answer, he calls Kenulph his most dear, most excellent, and most sweet son, and assures him that the archbishop Athelard had sufficient sanctity to conduct the souls of his subjects from the lowest depths of hell to the happy ports of heaven. Athelard, on his return, summoned a council, which met at Canterbury in the year 803, and there the decree of the pope, restoring that see to all its ancient rights, was read with great solemnity. Two years previous to this occurrence, the Northumbrians invaded Mercia, under the command of their king Eardulph, but were quickly opposed by the Mercian monarch at the head of a large army. As the forces on both sides were preparing for battle, the thanes and prelates of each nation assembled in council, and by their persuasion the two sovereigns entered into a treaty of peace and amity.—Kenulph was a liberal benefactor to the church. He not only restored the ecclesiastical supremacy of the See of Canterbury, but he

founded the monastery of Winchcomb, and made considerable donations to the bishopric of Worcester. A short time before his death, Kenulph entered Wales, and laid waste the kingdom of Powis. He reigned over Mercia twenty-four years. He died in 819, and was buried at Winchcomb in Gloucestershire.

Kenulph.

Kenelm was the only son of Kenulph, and was seven years old at his father's death. He had two sisters, Quendrida and Burgelmida; the former, desirous of elevating her lover to the throne, resolved to put the young king, her brother, to death. For this purpose she engaged Ascobert, the tutor of Kenelm, to conduct the boy into a wood at the close of the day, and to murder him there. The place where this deed was committed is called Cowbach, and forms a part of the parish of Clent in Staffordshire.* The author of the Polychronicon says, the body was thrown into a well. Several old writers speak of the miraculous discovery of the body. The following legendary account is from William of Malmsbury. "After the perpetration of this bloody deed, the inhuman sister seized upon the kingdom, and prohibited any enquiry after her lost brother. But this horrible fact, concealed in England, was made known at Rome by supernatural revelation, for, on the altar of St. Peter there, a white dove let fall a paper, on which, in golden letters, was narrated the death of Kenelm, and the place of his burial. Upon this the Pope sent over an envoy to the English

Kenelm.

* Shenstone commemorates this event in his 23rd Elegy.

"Born near the scene for Kenelm's fate renown'd,
I take my plaintive reed, and range the grove,
And raise my lay, and bid the rocks resound,
The savage force of empire and of love.

Fast by the centre of yon various wild,
Where spreading oaks embower a Gothic fane,
Kendrida's arts a brother's youth beguil'd;
There nature urged her tenderest pleas in vain.

Soft o'er his birth, and o'er his infant hours,
The ambitious maid could every care employ;
Then, with assiduous fondness, cropt the flow'rs,
To deck the cradle of the princely boy.

But soon the bosom's pleasing calm is flown;
Love fires her breast, the sultry passions rise;
A favour'd lover seeks the Mercian throne,
And views her Kenelm with a rival's eyes.

How kind were Fortune! ah! how just were Fate!
Would Fate or Fortune Mercia's heir remove!
How sweet to revel on the couch of state!
To crown at once her lover and her love!

See garnished for the chase, the fraudful maid,
To these lone hills direct his devious way;
The youth, all prone, the sister-guide obey'd;
Ill fated youth himself the destined prey!"

Erdswick gives this old Latin translation of a Saxon couplet:

"In Clent sub spinâ jacet in convalle Bovinâ
Vertrice privatus Kenelmus rege creatus."

"In Clent, in Cowbach, under a thorn,
Lyeth King Kenelm, his head off-shorne."

CHAP. 8. Kenelm.

kings to inform them of the murder of Kenelm. The whole being thus miraculously revealed, the body was taken out of the hole where it had been hidden, and with great solemnity conveyed to Winchelcombe in Gloucester." Ingulph says, the body of this martyr was discovered by a ray of extraordinary brilliancy beaming over the spot during the whole of the night.

Ceolwulph.

The iniquity of Quendrida was not long successful. The Mercians, indignant at her conduct, placed on the throne Ceolwulph, her uncle. The state was then divided into factions, and in the second year of his reign

Bernulph.

Ceolwulph was deposed, and a wealthy thane, named Bernulph, who was in no degree connected with the royal family of Mercia, was elevated to the sovereignty, in the year 821. He was a brave warrior, but the dissentions of the preceding reigns had weakened the kingdom. The East Anglians and the people of Kent, though reduced by Offa and Kenulph to the condition of tributaries, were always ready to join the sovereigns of Wessex in their attacks on Mercia. At this time the crown of Wessex was possessed by the illustrious Egbert, who from the moment of his ascending the throne, had formed the project of uniting the kingdoms of the Heptarchy under the dominion of his own sceptre. Egbert fermented the troubles of Mercia and its dependencies; but Bernulph resolved not to await the attack which he perceived was preparing to be made. He marched at the head of a large army into the territories of his foe, and engaged the king of Wessex at Ellandanum (now Wilton*) near Salisbury. The battle was fierce and sanguinary, and the victory was on the side of Egbert. Bernulph retired into Mercia, where he remained unable to bring another army into the field, while the troops of Egbert wrested the kingdom of Kent from the power of Mercia. At the same time, the East Angles seized this opportunity to throw off the Mercian yoke, and gave ear to the emissaries of Egbert, who offered to protect their independence. They took up arms and placed themselves under the command of one of the thanes, but Bernulph marched into their country and engaged them with great impetuosity. He was, however, defeated and slain.

Ludican.

The Mercians elected for their king, Ludican, a near relation of Bernulph. He continued the war with the East Anglians, and endeavoured, without success, to reduce them to their former subjection. After a reign of two years, he was defeated and slain in an engagement with the insurgents.

Wichtlaf.

During the usurpation of Bernulph and his relative Ludican, Mercia continued to be a prey to dissention. The people were oppressed, and the army which Kenulph had left numerous, well-appointed and victorious, had nearly perished in the ill-conducted wars of the two last monarchs. On the death of Ludican, the thanes and people of Mercia unanimously elected Wichtlaf to the sovereignty. This powerful thane is called *Dux Wicciorum*† by Ingulph, and his son Wigmund had espoused Elfleda, the

* The castle of Wilton had seven towers, and stood on the south side of the town. The battle (says Camden) was so bloody on both sides that the river (the Willey) was stained with the blood of near relatives.

† The *Wiccii* were the inhabitants of the east banks of the Severne. The word is derived from the Saxon expression, meaning *brooks*; and the title of Wichtlaf was probably the same in import as that of the Count of the Marches which divided Mercia from Wales.

Wichtlaf.

daughter of Ceolwulph, who was the last* of the Mercian sovereigns descended from Crida and Wibba. But soon after Wichtlaf ascended the throne, and before he could collect together the scattered forces of the kingdom, he was compelled by the generals of Egbert, who invaded Mercia at various points, to seek refuge in concealment. He fled to the abbey of Croyland in Lincolnshire, and during four months he was hidden from the eager search of his pursuers in the cell of Etheldritha, daughter of Offa, who had been betrothed to the unhappy Ethelbert, the youthful king of East Anglia. While Wichtlaf remained in this retirement, the abbot Siward negociated with Egbert, and obtained from that monarch the restoration of Wichtlaf to the throne of Mercia, on condition of an annual tribute. From that period the history of Mercia and its provinces belong to the general history of England, and therefore any regular connexion of incidents will not be expected.

The reign of Wichtlaf was not marked with any recorded occurrences. He seems to have been a peaceable tributary to Egbert, and we find him at a great council or parliament held at London by the command of that monarch, to consult upon the measures to be taken against the Danish pirates, who then infested the coasts of the kingdom. Wichtlaf retained a grateful recollection of the safety he had found in the monastery of Croyland, until the day of his death; and annually visited it, with much penitence, on the festival of St. Guthlac, when he never failed to present some valuable gift at the shrine. In the eighth year of his reign he confirmed the charter of Croyland, with many new privileges and donations. As some of these gifts serve to illustrate the manners of the period, the following translation of a paragraph in the charter will not be uninteresting. "I present to the secretary of the said monastery, for the service of the most holy altar, the crimson mantle, which I wore at my coronation, to be made into a cape or hood; and for an ornament of the most holy church, I give my golden curtain, in which is worked the destruction of Troy, to be suspended (if so it seems good to him) against the walls, on the anniversary of my birth. I present also to the steward of the said monastery, for the daily use of the person presiding in the refectory, my golden bowl, on the whole outside of which are carved fierce vine-dressers contending with dragons, and which I am accustomed to call my *Crucibolum*, because the sign of the cross is indented within by the transverse diameters of the bowl, with a similar form projecting without in the four corners: and I likewise give the drinking horn belonging to my table, that the elders of the monastery may drink out of it on festival days, and that, in their benedictions, they may sometimes be mindful of the soul of the donor, Wichtlaf."† In the conclusion of the same deed, he says that he would promise to this

* Wichtlaf appears to have been related to the royal Mercian family, not merely by the marriage of his son with Elfleda, but in blood, for in his grant to the monastery of Croyland, speaking of Etheldritha, he says, "*Carne quidem cognatæ meæ, sed, quod magis est, in Christo carissimæ sorori.*"

† *Ingulp.*—This horn and crucibolum of king Wichtlaf were well taken care of, and made use of, by the holy fathers of Croyland. When that monastery was burnt down in 1091, these were preserved, because, says Ingulph, "*in petrinis scriniis custodiebantur.*" And in the regulations after the conflagration, it was resolved that the monks, when refreshed from the horn of king Wichtlaf, should sing in chorus, in giving thanks after dinner, these verses to his memory—*Dispersit, dedit pauperibus*, with this addition, *Cornu eius exaltabitur.*

CHAP. 8. Wichtlaf.

holy monastery his body at his death, but that he had already made a vow that he should be buried at Repton. His gratitude and respect for the princess Edeldritha, in whose cell he had been concealed, was deep and lasting. As soon as he heard of her death (says Ingulphus) he was so overwhelmed with grief, that for a long time, as he lay upon a couch, he appeared to his attendants to be in the agonies of death. At length, by the favour of God, being somewhat recovered, he went to her tomb, and there fainted in the very ecstasy of sorrow, shedding, as his breathing returned, a flood of tears upon the tomb, as though he had lost his wife, his son and his whole family by some sudden misfortune. There he continued until the abbot Siward, whom he ever affectionately venerated as his father, reproving him severely, led him, still reluctant and holding back, from the sepulchre to his chamber. Nor was it long afterwards, when Wymund, his only son, having died of a dysentery, Wichtlaf caused him to be buried at the right side of the corpse of Etheldritha; and on the decease also of his wife Celfrida, in the course of the following year, he had her interred, with regal pomp and deep lamentation, on the left side of the same virgin. Wichtlaf himself expired in the thirteenth year of his reign, and was buried, according to his vow, in the monastery of Repton.*

Bertulph.

Wichtlaf was succeeded by his brother Bertulph, who likewise reigned thirteen years, a tributary to Ethelwulph, sovereign of the West Saxons. The Danes, who had carried their devastations far beyond the coasts of the kingdom, invaded Mercia during the reign of Bertulph, who, in order to maintain his armies and satisfy the avarice of these plunderers, seized much of the wealth of the monasteries. London and Canterbury had suffered greatly from the Danes, and Bertulph who, probably by the command of Ethelwulph, had marched at the head of his forces against the Danes, was defeated and put to flight. The victorious invaders then entered Mercia, which they entirely laid waste, and they would probably have accomplished the subjection of the whole kingdom, had not Ethelwulph attacked their main encampment at Oakley in Surrey, where after a sanguinary contest, he obtained so complete a victory, that very few of the Danes escaped. The Welsh made several successful predatory incursions into Mercia, during the first years of Bertulph's reign, but in the year 843, they were defeated by the Mercian king, who seems to have been entrusted by Ethelwulph with the command of the forces of the kingdom on this occasion. The Welsh sovereign Mervyn was slain in this battle. Bertulph enjoyed the favour and friendship of Ethelwulph, and his son Boerred was married to Ethelwulph's daughter: but there existed a person who had hereditary claims to the crown of Mercia, and who was daily acquiring the affection of the priesthood and the people, still desirous of an opportunity to assert the independence of the Mercian state. This was Winstan, the son of Wymund and Alfleda; who by his mother was descended from the royal branch which had given Mercia her most illustrious kings. On the eve of the feast of Pentecost, in the year 850, one of the sons of Bertulph, with the consent (says Ingulphus) of his father, slew this young prince, and thus extinguished the race of Crida. The body was

* Ingulphus.

buried at Repton, near that of Wichtlaf, but it was afterwards removed to Evesham. Bertulph resided chiefly at Repton, but sometimes kept his court at Tamworth, at which place he granted several charters to religious houses.—The following passage, translated from Ingulphus, exhibits in a striking manner, the craft, the ignorance and the blind devotion of that period. "In this council,* God performed a celebrated miracle in honour of that most holy confessor Guthlac, by which the devotion of the whole earth for making pilgrimages to Croyland, which had become more lukewarm than usual, might abound and revive daily along all the roads from all the provinces. That year the whole of England was afflicted with a disease which resembled the palsy; the nerves of men, women and children being struck with sudden and extreme coldness, like that of a sharp frost, in spite of the thickest clothing; particularly the arms and hands of men being rendered lifeless and totally withered; while intolerable pain seizing upon the sickening members, was the most certain indication of the approaching disease. It happened that at this council there were many among both the high and the low who were suffering under this affliction. When the affairs of the realm were proposed for discussion, Ceolnothus, the lord archbishop of Canterbury, who was troubled with this disorder, openly recommended that sacred affairs should be first debated, so that, by the vivifying grace of Christ, human matters might have a prosperous conclusion. To this proposition the council unanimously assented, and Siward, the lord abbot of Croyland was called for, because for many years previously he had been distinguished, in councils and synods, by his great eloquence and piety, as the divine interpreter and most esteemed expositor and promoter of the numberless concerns of the whole clerical body. In consequence of his extreme old age, he was not present, but by the friar Askill, a monk of his community, he had, in a most humble letter, apologized for his absence on account of the weight of his years. Bertulph, the king, being mindful of the complaints of the church of Croyland, detailed explicitly to the council himself the calumnies that had been but too often alleged against the lord abbot Siward and his monastery of Croyland, by the infatuated rancour of their adversaries, and commanded that such remedial measure as the council might determine should be put in force. When, therefore, the business was entered upon, and the petition of the lord abbot Siward, presented by the aforesaid friar Askill, had passed from hand to hand among the prelates and thanes of the whole assembly, and much diversity of opinion had arisen; Ceolnoth, the lord Archbishop of Canterbury, in a loud voice, said that he was sound and cured of his disease, through the merits of that most holy confessor of Christ, the blessed Guthlac, whose business was then in their hands. Also many others of the most powerful in that council, as well priests as magnates, cried out that they too had laboured under that disorder, but that now, by the grace of God and the merits of the holy Guthlac, they no longer felt any pain or numbness in any of their limbs. All of them bound themselves by a solemn vow, to make a devout pilgrimage, as soon as possible, to the tomb of saint Guthlac at Croyland. Whereupon King Bertulph commanded the bishop of

* Held at Kingsbury, on the Friday of Easter week, 851.

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London, who was then esteemed the best penman, and the most eloquent inditer, and who, moreover, being affected with the same disorder, had declared with great joy, that he was cured, to draw out the charter of the privileges of Croyland, and in his elegant hand-writing to express that honour to his holy physician Guthlac, which had been voted by the council. This was consequently executed; and therefore we find that in the engrossed copy of the deed, the archbishop of Canterbury signs himself 'Ceolnoth, the recovered and healthful;' St. Swithin, the bishop of Winchester 'rejoices in the miracles of the Lord;' Elfstan, bishop of Scherburn, and Arkenwald, bishop of Lichfield, 'rejoice in the increased glory of the church;' and Rethun, the bishop of Leicester, promises that 'as long as he lives, he will be the servant of saint Guthlac.'"

Boerred.

Boerred or Buhred succeeded his father in the year 852. This prince formed an alliance with Ethelwulph, the sovereign of England, by espousing his daughter Ethelswitha, at the abbey of Chippenham; and being attacked by the Welsh in the first year of his reign, he sought assistance from his father-in-law, and at the head of a considerable army, drove the invaders back into their own country with great loss. After his victory, Mercia enjoyed considerable tranquillity for the space of fifteen years, but in the year 868, the Danes, under Ivar and Hubba, having ravaged Northumbria, penetrated into Mercia as far as Nottingham, where they established themselves in winter quarters. Buhred, in the meantime assembling his troops, despatched messengers to Ethelred and Alfred, with pressing entreaties for immediate assistance. The cause of humanity, policy and justice, pleaded by the distressed husband of a beloved sister, was not urged in vain. The army of Wessex, commanded by the royal brothers, quickly forming a junction with Buhred's Mercian force, marched to the quarters of the invaders; but the subtle enemy, sheltered by the walls of Nottingham, and secure in their strong fortifications, well knowing that to conquer he must divide, wisely declined the proffered combat of England's associated force in open field; and as the allies were unable to break through the Danish circumvallation, Buhred, tired of a protracted siege, and of the maintenance of so large an army, entered into a convention with the enemy, in which it was stipulated, that the Danes should abandon Mercia and retire unmolested into Northumbria with all their plunder.

Hostilities having ceased, the Wessexians returned home, and the Danes retracing their steps, in the following year took up their winter quarters at York: but, urged by famine, the certain consequence of their devastating warfare, in 870 they left that city, and, crossing the Humber, landed at Humberstan in Lincolnshire, whence passing through part of Mercia, burning the abbies and murdering the monks of Bardeney, Croyland and Medehamsted, the present Peterborough, they entered the East Anglian kingdom.

The incursions of the Danes were frequent, and they desolated the country in every direction. The monasteries were seized and plundered, for there the most valuable effects of the people were conveyed, as to places that would be preserved by their sanctity. Ingulphus, who describes the events of that period more circumstantially than is usual in the old historians, narrates the destruction of the monastery of Croyland. That build-

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ing was connected with Repton, and was situated in the Mercian territories; it therefore belongs to our subject, and we shall give from Ingulphus an abstract of the more interesting particulars.—"At the commencement of spring, in the year 869, the Danes, after a short delay at York, sailed to Lindissy,* and up the river to Humberstan, where they laid waste the whole country, and destroyed the ancient and celebrated monastery of Bardney, slaying all the monks without mercy. There they remained during the summer, until the province around them was reduced to ashes. They marched, about Michaelmas, into Kesteven, where they burnt, murdered and consumed, all that came in their way. At length, during the September of the year ensuing, the brave Earl Algar, with two of his seneschals, Wibert and Leofric, called together the young men of Hoyland, and to these was added a company from the monastery of Croyland, consisting of two hundred robust warriors, who were, for the most part, fugitive soldiers, and were on this occasion commanded by Friar Tollius, a brother of the same monastery, who, before he had turned monk, had been famous throughout Mercia for his skill in warfare. Earl Algar drew also from Deeping, Langtoft and Barton about four hundred, and was joined by Morcard, the lord of Bourne, with his dependents, who were brave and numerous; and by Osgoth, lieutenant† of Lincoln, a veteran warrior, at the head of a body of Lincolnians, consisting of five hundred men, raised in Kesteven. On the festival of St. Maurice, they joined battle with the pagan Danes, and God granting them the victory, the christians having slain three Danish chiefs, with great slaughter of their followers, pursued the barbarians to their encampment, where they made a desperate resistance, and the night terminating the battle, the brave earl withdrew his forces. There arrived in the Danish camp, the same night, all the rest of the pagan chieftains,‡ who, dividing the country among them, had gone out to plunder. These were Gogrum, Baseg, Oskitel, Hulfden and Hamond, with their counts or companions,§ Frena, Unguar, Ubba, and two Sidroks, the elder and the younger, together with their troops, and an immense booty, among which was a numerous multitude of women and children. This being known, the greater part of the christians were smitten with fear, and deserted during the night; and there remained with the earl and his seneschals scarcely two hundred out of eight. With these at the earliest dawn of the day, they proceeded into the field against the barbarians, all prepared to die in defence of their country, for the faith of Christ, having first heard divine service and taken the sacrament. The brave earl, then perceiving that his army was very much exposed, placed the friar Tollius, with his five hundred men, because he esteemed them to be the strongest, upon the right wing, giving to him also the valiant squadron of Morcard of Bourne, with all who followed his banners; on the left wing he placed the illustrious lord lieutenant Osgoth, with his five hundred, appointing to it a brave squadron, namely, Hartington of Rehale, with his Stanford men, who were young and extremely warlike. Himself with his seneschals acted in the centre, ready to be in each wing should he perceive it necessary. The Danes, enraged the more by the preceding slaughter,

* Lindisfern. † Vicedominus. ‡ Paganorum Reges. § Comites.

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were burying their three chiefs, early in the morning, in the town which was formerly called Laundon, but which on account of the sepulture of the three Danish kings, is named Trekyngham, under the command of four chieftains and eight counts; for two chieftains and four counts remained to protect the camp and the captives. Then the christians, on account of the paucity of their numbers, closing their ranks so as to form one body, under the skilful direction of their leaders, presented the strong rampart of their united shields* against the attack of the archers, and a thick field of lances against the charge of the horse, throughout the day, in one immoveable station. When they had thus remained unvanquished until the evening, and the archers of the enemy had expended their arrows in vain, while their horsemen, who were wearied with continued efforts, began to lose their energy, the barbarians by common consent, feigning flight, appeared to be quitting the field. The christians, perceiving this, broke from their ranks, in spite of the commands and persuasions of their leaders, and in pursuing the pagans spread themselves abroad over the plain, without order and without the direction of their commanders. The barbarians, then turning back, fell furiously upon them, as lions upon a scattered flock of lambs. The brave Earl Algar, with the distinguished warriors already named, and the friar Tollius, forming themselves in a compact body, on a mound of earth which rose a little above the rest of the plain, sustained for a long time, the onset of the barbarians. And, when the aforesaid illustrious and ever-to-be-remembered Earl Algar, with the six intrepid leaders, saw that the bravest men of their forces were slain, they rushed together where the slaughtered christians lay in the greatest heap, and avenging their blood with all their force on every side, they fell at length covered with innumerable wounds on the corses of their brethren. A few young men, of Sutton and Gedeney, having thrown away their arms, escaped with great difficulty through the neighbouring wood, during the subsequent night, and entered the monastery of Croyland; where, crying out with sad and mournful lamentations, they related at the gate of the church, just as the matins were about to be celebrated by the abbot Theodore and the holy fathers, the total slaughter of the christians, including that of friar Tollius and his company.

"While all were dismayed at this intelligence, the abbot, retaining with himself, the aged monks and a few children (perhaps that their feebleness might incline the barbarians to pity) not recollecting the verse,

Nor faith, nor mercy feel these camp-bred men,

commanded all the strongest and youngest men, to take refuge in the adjoining marshes, and taking with them the sacred reliques of the monastery, namely, the sanctified dust of the body of Saint Guthlac, with his scourge and psaltery, with the most valuable jewels and records, such as the charters of King Ethelbald and of other sovereigns, confirming the foundation of the monastery, together with certain donations of King Wichtlaf; and there to remain until the end of the war. They, with much grief of heart, obeyed his commands; and, having laden a small boat with the aforesaid

* Durissimam testitudinem clypeorum.

reliques and regal records, they threw into the well of the cloisters, the table of the great altar, inlaid with plates of gold; (presented formerly by King Wichtlaf) and ten goblets, with wash-basins, bowls, pots, kettles, dishes and other vessels of brass; yet when these things were immerged, the end of the table, on account of its length, continually rose above the water. Then, as they perceived that the flames of the burning villages throughout Kesteven were gradually becoming nearer and nearer, and fearing the immediate attack of the pagans, they drew out the table and left it in the custody of the abbot and the aforesaid old men; and taking with them their boat, they arrived at the forest of Ancarig, which adjoins our island towards the south. There, with the friar Toretus, then a hermit, and with other friars who were there abiding, they remained four days, in number thirty; ten of whom were priests, and the rest of inferior rank. In the meantime, the abbot Theodore, taking with him two elders, concealed the above-mentioned table in the northern part beyond the church, so that it might not be immediately discovered. Then, clothing themselves in their sacred vestments, as well the abbot as all the rest, they assembled together in the choir, where they performed divine service at the regular hours, with the whole of the psaltery of David; and afterwards the lord abbot celebrated the high mass, the friar Elfgeth, deacon, the friar Savine, subdeacon, and the youths Egelred and Ulrick, censer-bearers, assisting at the service. When mass was over, and the abbot with the aforesaid attendants had participated in the communion of the holy mysteries, the pagans burst into the church. The venerable abbot, a true martyr and victim of Christ, was immolated on the holy altar, by the hand of that most sanguinary chieftain Osketul, and the attendants surrounding him were beheaded by the barbarians; the old men and the boys, attempting to escape from the choir, were seized and were put to death with excruciating torments, being required to discover the treasures of the church; the lord prior Asker, in the vestry, and the sub-prior Lethwyn, in the refectory, whom the younger brother, Tugarius, a child of no more than ten years of age, lovely both in countenance and form, having followed with inseparable step into the refectory, and beholding his revered instructer slain, he entreated that he might be instantly slain there, and expire with him. The younger count Sidrok was, however, moved with pity at sight of the boy, and stripping him of his cowl, he threw over him a Danish cloak, and commanded him to follow close behind him wherever he went; and thus of all the aged and the young that had remained in the monastery he alone was preserved, going in and out among the Danes like one of themselves, the whole time of his remaining with them, through the favour and protection of the aforesaid count. All the monks being slain by their torturers, and none of the treasure being yet discovered, the Danes demolished with hatchets and stakes all the sepulchres of the holy men who reposed in marble tombs, to the right and left, around the sepulchre of St. Guthlac: namely, to the right, the sepulchre of St. Cessa, priest and hermit, and the sepulchre of St. Bettlemus, a man of God, and some time servant of St. Guthlac (the sepulchre to the pious memory of the lord abbot Siward was to the left of that of St. Guthlac, as was the tomb of St. Egbert, the confident and confessor of St. Guthlac) there was also the tomb of St. Tat-

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win, formerly a leader of Croyland, and the pilot of the holy Guthlac: also the tomb of the holy virgin Etheldritha, and also the tombs of Celfrida, the queen, and of Wymund, the son of king Wichtlaf, were broken up by the barbarian Danes, who not finding the treasures they expected, were greatly enraged, and heaping together the bodies of these sanctified persons, they set them on fire on the third day of their arrival, and most fatally consumed them all in the flames, together with the church and all the buildings of the monastery.—This happened on the 8th calends of September, 870.

"On the fourth day they passed on to Mideshamsted,* with innumerable herds of cattle and horses: where finding that the principal monks had concealed themselves beneath the monastery, and that the gates were barricadoed, they attacked the walls on every side with their archers and with their battering instruments. On the second assault, as the pagans were rushing in, Tulba, the brother of count Hubba, fell in the entrance grievously wounded by a stone, and was carried by the hands of his followers into the tent of his brother, without any hope of life. Whereupon Hubba, foaming with anger and violently enraged against the monks, slew with his own hand every person who wore the symbol of our holy religion: the fury spread from band to band: not one of the whole monastery was preserved. The venerable father, lord abbot Hedda, as well as all his brotherhood, with their countrymen, were slain. The boy Tugarius was admonished, by the count Sidrok, his master, to avoid meeting count Hubba in any place. All the altars were overturned, the monuments were entirely demolished, the large library of holy books consumed by fire, an immense pile of the charters and records of the monastery torn to pieces, the precious corpses of the holy virgins Kyneburga, Kyneswitha and Tibba trampled upon, the walls thrown down, and the church with all its buildings set in flames, the conflagration of which continued during the five following days.

"The pagan army, on the fourth day, having obtained abundance of plunder from all parts of the country, re-assembled and proceeded towards Huntingdon; and as the two counts Sidrok, who for the protection of the rear of the forces, on fording rivers, always closed the march, were crossing the river Nene, just as the troops had passed over in safety, they lost two chariots, heavily laden with great wealth, besides a quantity of household goods, which sunk in a deep whirlpool of the stream on the left side of the stone bridge, and the cattle were drowned before they could be extricated from the water. The whole of the attendants of the younger Sidrok being busily employed in drawing the chariots out of the flood, and in carrying the goods they contained into other wagons and carriages, the young friar Tugarius escaped by flight to the nearest wood, and walking all night, arrived by day-break at Croyland. He there found the monks who had returned the preceding day from Incarig, and who were employed in extinguishing the fire which still raged among some of the ruins of the monastery. When they beheld him whole and in safety, they were for a short time comforted, but when they heard from him in what places their abbot, the elders, and their fellow monks lay slain, and how that the sepulchres

* Now Peterborough.

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of the saints were demolished, and that all the records and sacred volumes, with the bodies of the saints had been burnt, they were confounded with inconceivable sorrow, and their lamentations were long and violent. At length, exhausted by weeping, they resumed their labour, and clearing away the fragments of the roof of the church from around the great altar, they found the headless body of their venerable abbot, the father Theodore, stripped of clothing, very much burnt and bruised, and beaten to the earth by the fall of the rafters (on the eighth day after his death, a little remote from the place where among the extinguished torches his life had been extinguished) together with the bodies of the other priests (except that of Ulric the censer-bearer) which lay in the same manner, crushed by the weight of the fallen beams into the earth: but these were discovered at different times.

"In the meantime the Danes laid waste all the country as far as Cambridge, a celebrated sanctuary situate in the isle of Ely, and all that were found in it, as well nuns as friars, they slew; the cattle and the piles of wealth which had been brought there from all the region around, as a place of security, were carried away by the barbarians, and the buildings were set on fire. Then passing over into East Anglia, they slew the brave Earl Ulketul, with his whole army, who had marched against them and most firmly opposed them: also, they martyred the most holy Edmund, the king of that province, whom these barbarians having seized, they bound him to the trunk of a tree, as a mark for their arrows, and then showering upon him their spears and darts, they pierced him through with horrible cruelty, and cut off his head, on account of his pious faith in Christ and his patriotism. Thus having become masters of East Anglia, they remained there the whole winter. In the year following, they invaded Wessex and fought many battles with king Ethelred and his brother Alfred, with various success; in these their chieftains Boseg and Orguil being slain, and many leaders, among whom were the two Sidroks, Frena, Osbern, Harola and Fungo, with a vast multitude of their followers, the christians were ultimately victorious."*

Dissensions among the Saxons.

From such sufferings the Saxon kingdoms were never free for any considerable interval; whilst their internal divisions and the increasing ambition of their respective sovereigns, together with the avaricious imbecility of the monastic institutions, which held immense estates that they were unable to defend, increased the misery of the country. The sovereigns of Wales also took advantage of these dissensions and distresses. The western districts of Mercia were infested by their inroads, and Buhred was engaged in repressing their incursions, when he heard that the Danes had laid waste all the eastern part of his domains. He hastened to London and raised a considerable army; but this was not done without the infliction of additional calamities on his subjects. A heavy tax was levied in the isle of Ely, the inhabitants of which were still deploring the recent devastations of the barbarians, and Buhred seized upon Stamford, Huntingdon and Wisbeach, although they were monastic property, and quartered his mercenary troops upon the lands of abbeys and other holy houses.

* Ingulphus.

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In vain, Godric, abbot of Croyland, displayed before the sovereign and his military court, the charters of the donors and the confirmations of kings and princes, he could obtain no mitigation of Buhred's demands, who bestowed the manors of Spalding, Depyng, Croxton and other territories belonging to that abbey, upon different officers for the maintenance of his soldiers, and passing over to Lindsay, he laid the extensive lands of the monastery of Bardney under contribution, and the more distant villages he granted to his most distinguished warriors.

It is not surprising that the monkish historians should attribute Buhred's want of success against the Danish invaders to his sacrilegious conduct, and probably his troops themselves were sometimes disheartened by a consciousness that they and their leader had offended against the superstition of that period. A series of misfortunes attended the Mercian king during the ensuing three years: and in 874, while Alfred, who had then succeeded his brother Ethelred, was delayed in Somersetshire, the Danes re-entered Mercia, and took up their winter quarters at Repton, where they destroyed the celebrated monastery, the mausoleum of all the Mercian kings. Buhred had reigned two and twenty years, if to be continually in arms against internal faction as well as against barbarous invaders can be called reigning. He saw the residence of his predecessors occupied by the piratical Danes, and the names of the kings of Mercia effaced from their monumental tablets. He departed for Rome, and a few days after his arrival he expired. He was buried at the Saxon school in that city. His queen, immediately after his departure, endeavoured to follow him. She died during the journey and was buried at Ticini.

Ceolwulph.

Ceolwulph, whom the historian Ingulphus describes, as an Englishman by family but a barbarian in impiety, succeeded Buhred, one of whose attendants he appears to have been, in the sovereignty of Mercia. He was placed on the throne by the Danes, to whom he swore fidelity. His only care was to raise the tribute which his masters had imposed upon him as the price of his elevation, and under terror of losing his life by the hands of the barbarian chieftains who composed his court, he issued edicts forbidding any resistance to the Danish exactions. In his progresses through the kingdom, he completely stripped the few remaining cultivators of the land of all that remained to them: he fleeced the traders: he oppressed the widows and orphans, and he put the votaries of religion to innumerable and unheard of tortures, under the accusation that they concealed their treasures. On the abbot and fraternity of Croyland alone, he laid an imposition of one thousand pounds, which, says Ingulphus, so impoverished the monastery that converts ceased to frequent its walls; the greater part of the professed monks and novices either returned to their friends or dispersed themselves throughout the country, while the abbot Godric remaining in the monastery with a few who were attached to him, dragged out a miserable existence in the lowest poverty. "It was then," continues the monastic historian in a strain of lamentation, "that all the goblets of the monastery except three, together with the whole of the silver vessels except the *crucibolum* of king Wichtlaf, and other plate and jewellery of immense

value, which were either converted into coin or sold for money, scarcely sufficed to pacify the insatiable cravings of Ceolwulph." CHAP. 8.

The success of the illustrious Alfred in the west and the south of the island was the signal for the fall of this wretched instrument of the Danish marauders. As this wise and heroic prince advanced towards the confines of Mercia, the Danes became more and more mistrustful of the wretch whom they had placed upon the throne for no other purpose than to give a sort of regal authority to their exactions; and it is probable that Ceolwulph, weary of a position in which he was the agent of the tyranny of others, had endeavoured to enter into some sort of a negotiation with Alfred. Whatever was the cause, he incurred the displeasure and drew upon himself the vengeance of his masters. They deposed him, and in a state of complete nakedness* and destitution, they expelled him from the palace, and left him to perish, an object of execration and contempt to all who beheld him. Shortly after this event, the victorious Alfred, before whom the Danes either bowed down in submission, or fled to their piratical chieftains on the coast, seized upon the realm of Mercia and incorporated it with his other dominions. Thus fell, never to be resumed, the Mercian crown, which from the time when it was assumed by Penda, until the moment when the brows of Ceolwulph were deprived of its subjected and degraded honours, was in existence about two hundred and thirty years. Alfred.

In Mercia, as in all the other Saxon kingdoms, we see a rude and courageous band of military colonists under a leader of their own choice, and claiming a share in all the benefits of conquest, seizing upon the lands, enslaving or expelling the people, and spreading their own name, manners and institutions over one of the most distant, though not the least distinguished of the deserted provinces of Rome. That this middle district of the island had not been neglected by the Romans there exist many interesting proofs, which are already noticed in the chapter respecting the antiquities of this county; and, since in mountainous provinces, the inhabitants of a conquered country seek refuge and retain, in proportion to the difficulties of these natural defences, their manners and their religion, so we may justly conclude, that Britons, and even the descendants of Roman settlers, continued to reside among the northern ravines of Derbyshire even when the surrounding plains were in the possession of the Saxons. An investigation of the traces which those people have left behind them would not ill repay the researches of the curious, but we have neither space nor time to be circumstantial upon this subject.† But the civilization that partially remained among the Roman colonists and which had extended itself among the Britons, whom that great people taught as well as subdued, had not its usual influence over their Saxon invaders. The wars which lasted three hundred years between these military adventurers and the previous possessors of the soil, who maintained their ground as long as they could, and receded step by step before their conquerors, fomented a spirit of mutual animosity, which Retrospect.

* Usque ad ipsa verenda nudatus. *Ingulph.*

† To *plaust* hay or corn is a term used in the High Peak, for the carting of those articles; a word evidently derived from the latin *plaustrum:* and the *sord,* from *sordes,* is the common expression for the rind or refuse of cheese and bacon.

CHAP. 8. totally precluded any communication of habits and manners. This was much to be lamented, as the Britons were christians upon a purer system of christianity than that which had gained ground at Rome after the enrichment of the Roman pontiff by Constantine and his successors. The Saxons were unfortunately doomed to receive christianity from the missionaries of the pope, and probably they did this the more readily as they found their enemies, the christian Britons, treated as schismatics by the papal edicts. Accordingly the enrichment of the priesthood was one of the first tenets they were taught, and this sort of practical devotion was well suited to a rude and illiterate people, whose chieftains and thanes were opulent in the spoils of a newly devastated country. These sanguinary warriors could not easily be taught to pray, and their conversion was held sufficient when it induced them proudly and munificently to purchase the prayers of others. To found monasteries, largely endowed with surrounding manors, including not only the rents of those manors, but the enslaved serfs or tenants who cultivated them, was one of the chief marks of piety in the Saxon kings and their thanes; to quit the cares, the toils and the glories of their thrones, and to seek the indulgences of monastic quiet in these religious seclusions, on which they had themselves previously bestowed the means of luxurious retirement, was another. King Wichtlaf, as we have seen, gave the wine-bowl which he was accustomed to call his *crucibolum* and his capacious drinking horn, to the monks of Croyland.

Introduction of Christianity.

Towards the latter end of the sixth century the Saxons of Kent were converted to the christian faith, and about fifty years afterwards, Peada, the eldest son and successor of the sanguinary Penda, encouraged by his example the establishment of christianity throughout Mercia. The monastery of Medeshamsted was commenced by this monarch, and completed by his two brothers who succeeded him. The latter, Ethelred, after a reign of thirty years, professed himself a monk, and retired to the monastery of Bardney. Two sisters of these pious princes are likewise lauded by the ecclesiastical writers for their sanctity; and their nephew, Kenred, after a short reign of four or five years, made a pilgrimage to Rome, and closed his life at the foot of the apostolic throne.

Vestiges of two factions in these early times are perceptible in the pages of the monkish writers. The accumulating power and wealth of the clergy necessarily raised much jealousy among the thanes or nobles, who soon found that all the charges of war were thrown upon them, while the ecclesiastic territories were exempted from all civil taxes and military service. These immunities seem at first to have been conferred as testimonies of particular respect on the more favoured establishments, but Ethelbald, one of the most powerful of the Mercian monarchs, issued, in the year 719, a statute,* by which he declared all the religious houses in his dominions, absolved from all taxes and civil or military services whatever, except those for the construction of roads and bridges, from which the edict says, none can be exempted. This latter clause proves the attention of Ethelbald to the intercourse of his subjects throughout his dominions;

Dissensions between the clergy, &c.

Thanes.

* Ingulph. p. 5.

and it may be justly concluded that trade, which is the principal object of such intercourse, had become worthy of royal protection. But, this statute also shows that there existed a faction adverse to the immunities enjoyed by the ecclesiastics, for it speaks of similar grants having been treated with contumacy, and of persons, who, having no regard for the salvation of their souls, accused the holy possessors of forging the deeds of donation. This adverse faction, headed by a thane named Beonred, displayed its power in a successful rebellion. Ethelbald fell in battle, and the usurper possessed the throne for some months.

The succeeding reign of Offa was marked with considerable dissension. He was a strong-minded man, descended from Penda, by a different line, and owed his elevation to the monkish party, whose views he encouraged by founding the monastery of black monks at St. Albans, but in less than thirty years after his decease, we find the kingdom in a discordant state, and the throne occupied by Bernulph, whom Ingulphus describes as obstinate and perverse, and illustrious only for his wealth and powerful influence. The neighbouring kingdoms of the East Angles and the West Saxons took different parts in the commotions of Mercia, but Bernulph and his relative Ludican, who were supported by the disaffected thanes, were for some time successful, and Wichtlaf, who is termed the Duke of the Wicci, was called in as the leader of the ecclesiastical party, but he was for some time compelled to seek refuge in the marshes of Lincolnshire and the monastery of Croyland.

It is impossible to peruse the remainder of the Mercian history, while that district retained the denomination of a kingdom, without perceiving how much the dreadful inroads of the piratical Danes were indebted for their success, to the dissensions with which the realms were distracted. The monks nominated and favoured those princes who increased their domains and confirmed their immunities, while they, reluctantly and scarcely without compulsion, contributed either men or money to their best protectors. Bertulph, the brother of Wichtlaf, was supported by the West Saxons. He put to death his grand-nephew, but he seems to have been a man of considerable policy, who endeavoured to conciliate the contending parties and to raise Mercia to its former rank in the heptarchy. He, however, compelled the monasteries to contribute to the sustenance of his army against the Danes, and again conciliated the friendship of the abbots by ample donations. But the greatness of Mercia was passed. The West Saxon monarchs were supreme, and Boerrhed had to defend a tributary sceptre, not only against the invasions of barbarians, but against the tumultuous factions by whom he was surrounded.

The church of Mercia was, at its establishment by Peada, under the government of a bishop named Diuma, a Scot, who was accompanied in his zealous endeavours in converting the pagan Saxons to christianity, by three other holy men. The success of their efforts was slow, and Cellach, the second bishop of Mercia, was obliged to retire into Scotland, to avoid the persecution carried on by Wulpher against the christian converts, at the beginning of his reign. But this persecution was not of long duration. Wulpher himself became a christian, and under his protection St. Ceadda,

CHAP. 8. Mercian church.

or Chad, fixed his episcopal seat at Lichfield. This diocese was very extensive, and was afterwards divided into four, the sees of which were fixed at Lichfield, Worcester, Hereford and Leicester.

It does not fall within our province to narrate the contentions between Theodorus, archbishop of Canterbury and Wilfrid, archbishop of York, which occupied many years towards the close of the seventh century, and interested the sovereigns of Northumberland and Mercia. In the year 703, Wilfrid, having irritated his pupil and sovereign, Alfred of Deira, sought protection from Ethelred, king of Mercia, and was by him promoted to the see of Leicester; but he soon incurred the displeasure of his royal patron; and, having by his haughty conduct created himself many enemies among the princes and prelates of the heptarchy, he carried his complaints to the pope.

There can be little doubt that the authority possessed by the archiepiscopal sees of Canterbury and York, was the occasion of frequent jealousies to the secular clergy of the other kingdoms. Offa was sensible of this; and therefore to prevent the interference of archbishops whose sees were in the domains of his enemies, with the clergy of his own realm, resolved that Mercia should have its own primate. For this purpose he privately solicited Pope Adrian I. to raise Lichfield to an archbishopric. After great opposition on the part of Lambert, the archbishop of Canterbury, this important point was attained, and Higbert, bishop of Lichfield, was declared an archbishop. Offa has been accused of purchasing this favour from the pope, by the tax called *Peter-pence*, which was levied on Mercia and East Anglia, nominally for the support of the Saxon school at Rome. With her subsequent misfortunes, Mercia lost her archiepiscopal see; which she enjoyed only fourteen years.

The conversion of the Saxons of England to christianity is generally attributed to the labours of St. Austin and the Benedictine monks who accompanied him in his mission under the direction of Pope Gregory I. but it must not be forgotten that christianity was the religion of the vanquished Britons, and that it flourished in considerable purity throughout the Lowlands of Scotland. These Italian missionaries never entered Mercia, the inhabitants of which followed the example of their northern neighbours of Northumbria, and listened to the exhortations of the Scottish monks of St. Colomba; for which we may presume they were prepared by the residence of many christian Britons in the mountainous districts, on whom, Bede tells us, emancipation was bestowed. The length of time that elapsed before christianity was generally embraced by the Saxon sovereigns, and the rapidity of its subsequent progress, has surprised many writers, but we are not to suppose that it had not, during that period, made converts among the lower orders of the people, with whom, as it was taught by the Scottish and British clergy, it could not but be an acceptable persuasion to nations of free men as the Saxons were by their native institutions. It is plain from the letters of the pope, that he had heard of the increasing influence of christianity, and his fears arose, lest the converted Saxons should, like their instructers, the Scots and Britons, be reluctant to acknowledge the supremacy of the Roman see. Hence it appears that the ancient British

Mercian church.

christianity was that professed by the people, while the Romish christianity was received by the princes and the wealthy thanes. Even the Mercian kings, some of whom seem to have felt all the devotion of neophylites, were reluctant to receive the prelates nominated by the apostolic chair, and preferred religious men of Scotland or of their own dominions to the newly-founded bishoprics and monasteries. It was not until the year 816, when a council was held at Calcuith, that the rites and ceremonies of the Roman church were fully established, and it was there declared that no Scottish monk or other priest of that country should baptize or perform any divine ordinance in England.

But the most remarkable characteristic in the introduction of christianity among the Saxons of England, is the rapid conversions that were made in the highest classes of society, and the small degree of persecution with which it had to contend. Its saints were numerous, and generally of distinguished rank; its martyrs were extremely few. St. Werburga, whose name is bestowed on one of the churches of Derby, was a Mercian princess, and St. Alchmund, to whom another ancient edifice in the same borough is consecrated, was a Northumbrian prince. During the space of about two hundred years, in the Saxon annals, we have (says Rapin) seven kings, seven queens, together with eight princes and sixteen princesses, distinguished with the title of saints; besides ten kings and eleven queens who resigned their crowns and palaces for the cowl and the cloister.

CHAPTER IX.

The Political History of Mercia continued. The Earls of Mercia, &c.

FROM the time of the victory of Egbert over Bernulph, king of Mercia, at Ellisfield, near Winchester, which happened about the year 819, the state of Mercia became tributary to the kings of Wessex. The East Anglians, who since the time of Offa, had been subjected to Mercia, immediately revolted and joined the conqueror. The Mercians, however, as we have seen, struggled against their impending fate, and it was not until after the complete defeat of Wichtlaf and the mediation of the abbot of Croyland, with whom he had taken refuge, that the submission of Mercia was confirmed by a treaty. Buhred's queen was the daughter of Ethelwulph, king of Wessex, and he relied much upon that connexion in his endeavours to free his dominions from the ravages of the Danes, but although his brother-in-law, Ethelred, brought aid to him at Nottingham, he was obliged to purchase an inglorious truce with the invaders. About the time of the accession of Alfred to the throne, the Danish chieftain, Ubba, invaded Mercia, and Buhred again raised money from the monasteries in order to induce the barbarians to quit his territories. They soon returned, and Buhred, unable to raise an army or to save his factious kingdom from their depredations, retired to Rome.

Ethelred, Duke of Mercia.

When Alfred had reduced the Danes to submission and taken from them the city of London, he conferred upon Ethelred, who had espoused his daughter Ethelfleda, the title of Duke of Mercia, and placed London under his government. This was in the year 887, when Mercia was still in the hands of the Danes. They possessed the towns of Derby, Nottingham, Leicester, Lincoln and Stamford, and Alfred, upon condition of their acknowledging his sovereignty over them, permitted them to retain these places, under the denomination of the Five Danish Burghs of Mercia. The title of Ethelred, as it is said to be found in his charters, was "*Dux et Patricius Merciorum*;" but some of our historians assert that his title was *Subregulus* or Vice-regent of the Mercians.

Ethelfleda.

In confining ourselves as strictly as possible to the history of Mercia, we pass over many of the leading events of the reign of the illustrious Alfred, which belongs to the general history of England. On the accession of Edward the Elder, the son of Alfred, the Danes again revolted, and renewed their ravages under pretence of supporting the claims of the prince Ethelward, the son of Alfred's elder brother. The courage and activity of Edward were well seconded by the Earl of Mercia and his heroic wife, the princess Ethelfleda, who in the arts of war as well as those of peace emulated the actions of her father. Some of the strong holds which the Danes held in Mercia were seized, and the Britons of Wales, who had been called upon to aid the cause of Ethelward, were checked and defeated in their progress towards the borders of Mercia. It was not, however, until two

years after Ethelward had fallen in battle, that the Danes sued for peace. It was granted them, but uneasy under the authority which Ethelfleda and her husband exercised in Mercia, they renewed the war in the year 910. Their audacity cost them dear; they suffered severely in two battles, and, by the advice of his sister, king Edward established a line of military posts across the country, of which one was fixed near Becanwell or Bakewell in this county. Ethelred died in 912, and the sovereignty of Mercia was exercised by Ethelfleda alone. Her first care was to repair those towns that had been demolished by the Danes, and to raise castles and other fortresses; the chief of which were Tamworth, Stafford, Warwick, Runcorn in Cheshire, Cherbury in Shropshire, Wensbury in Staffordshire, Leicester, Edesbury in Cheshire, besides the castles of Stamford, Bridgnorth and Scargate. Whilst she was thus employed, Hughan, a Welsh prince, encouraged by the insurgent Danes, entered Mercia at the head of a considerable army, but he had scarcely made a junction with his allies when he was met and defeated by Ethelfleda, and compelled to take refuge in the town of Derby.

The Saxon princess immediately carried her arms into the unprotected territories of the Cambrian prince, laid the country waste, took and demolished the castle of Brecananmere (now Brecnock) and made prisoners his queen and her attendants. She then, with her victorious army, marched upon Derby, which was strongly garrisoned by the Danish Burghers and by Hughan with the remnant of his forces. Her first assault upon the town was unsuccessful. The castle, which stood on the elevated ground that rises south of the town from the banks of the Derwent, was strongly fortified and well defended. Four of her principal officers, the wardens of her person, fell before the walls, and it was not till the gate was burnt down by the direction of the Lord of Ely, one of the confidential counsellors of Ethelfleda, that the Saxon soldiers were able to force their way into the citadel. The destruction that ensued was sanguinary, and the Cambrian prince fell in the conflict. The Danish chieftain, who held the government of the town, fled into Northumberland, and the castle was completely demolished.*

In the ensuing year, 919, Ethelfleda compelled the Northumbrian Danes to acknowledge her dominion, and obtained by capitulation the town of Leicester. She died at Tamworth on the 19th of July in that year, and was buried by the side of her husband in the eastern porch of the cathedral church of St. Peter at Gloucester. The heroic character of this princess has been the subject of high eulogium: her father had made her his companion in the camp and in his counsels, and she made his actions the examples of her own conduct. Ingulphus says, her brother, Edward the Elder, was greatly indebted to her courage and wisdom, and he calls her "*virago prudentissima et antiquis Amazonibus præferenda:*" a heroine of the highest prudence, and surpassing the ancient Amazons.—She was the mother of only one daughter, and it is related of her, that having suffered severely in giving birth to that princess, she devoted her life to military affairs and to government. Her abstinence from her husband's bed was

* The bones, spear-heads, &c. that have recently been found in ground to the south of Babington hill, and in castle fields, are supposed to have remained there ever since this memorable conflict.

CHAP. 9. Ethelfleda.

not the consequence of that superstitious restraint which was prevalent at that period: it was a devotion to the recovery and welfare of the country placed under her dominion, which she fixed in her estimation above the pleasures or the cares of domestic life.

Edward the Elder.

On the death of Ethelfleda, the sovereignty of Mercia was resumed by her brother, Edward the Elder. This was an act of indispensible policy: for whatever might have been the hereditary claims of his niece Elwina, the daughter of Ethelfleda, it would have been imprudent to have entrusted an extensive and disturbed territory to the dominion of a youthful female, particularly if it be true that she had already betrothed herself and promised the sovereignty of Mercia to Reginald, one of the Danish chieftains. According to some authors, it is said that she was consigned by her uncle to a nunnery, and by others, that she was disposed of in marriage to a thane of the West Saxons.

Athelstan.

The Danes, though compelled to acknowledge the sovereignty of Edward, were still in possession of great part of the kingdom, north of the Trent. The succours they received from Norway and Denmark enabled them to make further ravages, and the ensuing reign of the brave Athelstan, the son of Edward, was a series of desperate conflicts. The five Mercian towns, already mentioned, were again in the hands of the invaders, and although Athelstan and his brother Edmund, who succeeded him, were generally successful in checking and chastising these barbarians, yet no peace made with them was of any considerable duration. After a cessation of arms, to which two of the Danish chieftains of Northumbria had been compelled by king Edmund to submit, no sooner had he retired into Wessex than the Danish princes engaged the Mercian Danes to aid them in their renewal of the war. Edmund, apprized of their movements, returned into Mercia and dispossessed the Danes of Derby, Leicester, and the three other places which they still retained in that province.

Edmund.

Seculars and Monks.

But it was not only by the irruptions of the Danes and their attempts at conquest, that the peace of the kingdom was disturbed: jealousies had arisen between the secular clergy and the monks, and the clamorous dissensions of those whose duty it was to inculcate the christian doctrines of peace and good-will, prevented the kingdom from enjoying the advantages that might have resulted from its temporary deliverance from the ravages of the northern invaders. The monasteries were desolate, and those monks who escaped the swords of the plunderers fled into distant countries. On the return of more tranquil times, the secular clergy were not slow in possessing themselves of the monastic lands, which they bestowed upon the resident priests, and placed under the protection of their bishops. Alfred was unwilling to disturb this new arrangement, and was probably more inclined to encourage the residence of the priesthood among the people than to restore the monastic establishments to their former wealth and influence. In compliance with the remonstrances of the pope, he built and moderately endowed some new monasteries, but was very reluctant to grant any aid for the repair and restoration of those which the ravages of war had left in ruins. So far do we find him favouring the secular priesthood, in preference to the monks, that in his hereditary kingdom of Wessex he

caused Plegmundus, the archbishop of Canterbury, to consecrate seven bishops at one time. CHAP. 9.

Dissensions of Seculars and Monks.

It cannot be supposed that the monks saw this preference without envy and displeasure, particularly when they perceived that it made a part of the state policy of the three succeeding reigns. Such resolute and heroic monarchs as Edward the Elder, and his two sons, Athelstan and Edmund, were not likely to yield either to monkish prayers or monkish denunciations, though the latter, struck with the uncommon talents of Dunstan, the celebrated abbot of Glastonbury, opened to his ambition the road to power.

After the victories obtained over the Danes by this succession of prudent and warlike princes, the kingdom might have obtained stability and flourished under equal laws, but for the growing animosity between the monks and the secular clergy. The former, reduced everywhere to a state of want by the devastations of the invaders as well as by the imposts laid upon them by various sovereigns for the support of the armies, increased in sanctity and in the affection of the lower orders of the people. This was particularly the case in the districts occupied by the Danish settlers, who received the first rudiments of christianity from the few survivors of those whom they had slaughtered and plundered, and who, either from necessity or devotion, lingered among the ruins of their monastic establishments. In Mercia the secular clergy were nearly extirpated. The manors which formerly constituted the wealth of the religious houses in that province, were in the hands of military thanes or were held by the Danish soldiery. To the latter of these, in particular, the secular clergy were extremely obnoxious, on account of their dependence upon the suffragan bishops, whose authority the Danes considered as connected with that of the Saxon monarchs.

When Ethelward disputed the right of succession to the crown with his cousin, Edward the Elder, his claim was espoused by the Danes, who were then quietly settled in Mercia and East Anglia, and to the care of the monks was confided the tuition of his infant son Turketul,* who was probably born of a Danish mother. The child imbibed from his instructers much of their knowledge and piety, and when on the defeat and death of his father, he was taken to the court of his victorious kinsman and restored to his paternal estates, he retained that regard for the monks which had been implanted in his mind during his earliest years. He seems to have been a man of talents and probity, but attached even with prejudice to the principles in which he had been educated. King Edward urged him in vain to espouse some one or other of the illustrious daughters of his thanes and dukes, but that devotion to chastity which he had acquired among his monkish preceptors was unsurmountable. When the monarch saw this he endeavoured to persuade him to accept of ecclesiastical dignities, and these persuasions were seconded by Plegmund, archbishop of Canterbury, who was originally a Mercian monk, and had been one of the counsellors and friends of Alfred the Great. "But he, with various excuses," says Ingulphus,† "escaping from all honours of this description, retained

Turketul.

* Some writers make Turketul the son of another prince of the name of Ethelward.

† Ingulphus, page 36.

CHAP. 9. Turketul.

almost as much horror of them through every period of his life, as though they were the snares of Satan for the subversion of souls." The king, still desirous of placing him in a situation in which his learning and virtue might be of service to the state, made him his chancellor.*

When Athelstan led an army into the north to repress the insurrection of Anlaff, the tributary king of Northumberland, who was aided by Constantine, king of Scotland, and Eugenius, king of Cumberland, he was attended by his chancellor, Turketul, who commanded a chosen division of Mercians and Londoners, and was present at the celebrated battle of Brunford, in Northumberland, in which the king of Scotland, with several Irish, British and Danish chieftains, was slain. This victory is said to be chiefly owing to the prudence and intrepidity of Turketul, who, accompanied by a stout and valiant soldier named Singrin, a centurion in the troop of Londoners, pierced through the opposing squadrons, and arriving at the spot where the king of Scotland was encouraging his troops, smote him from his horse to the ground and endeavoured all he could to take him alive as his prisoner. "Then the Scots rallied in compact bodies, and made every effort to preserve their fallen sovereign. Multitudes fell upon the few followers of Turketul and Singrin, and Turketul himself became the principal object of their vengeance, who at that moment, as he frequently afterwards confessed, began to repent his temerity. The Scots advancing had nearly overpowered his small but valiant band, and were dragging their king out of his grasp, when the centurion Singrin, with one blow of his sword, despatched the struggling prince. Constantine being slain, the Scots again gave way and left an open road to Turketul and his soldiers. As soon as the death of the Scottish monarch was known, Anlaff took to flight, and a most unheard-of slaughter of the barbarian troops ensued. Turketul was accustomed to glorify God for his preservation in this dreadful battle, and esteem himself most happy and fortunate, that he had not killed any man and had severely wounded none, although in fighting for one's country and particularly against pagans, this is permissible."†

This brave but peaceable chancellor was subsequently employed in a mission more suitable to his disposition. The victory obtained by Athelstan had spread his renown throughout the continent, and the most powerful princes courted his alliance. The emperor Henry and Hugh the Great, king of France, sent ambassadors with presents, to demand two of the sisters of Athelstan in marriage with their sons, and Lewis, prince of Aquitain, sued to be the husband of a third. The chancellor Turketul was appointed to conduct the princesses, who, Ingulphus says, surpassed Diana in the honour of chastity, and Helen in corporeal beauty.

On his return to England, Turketul devoted himself with earnestness to the object he had nearest his heart, and exhausted his powers of persuasion with the hope of inducing Athelstan and his successor Edmund to restore the monasteries. These princes respected his motives and sometimes appeared to encourage his views; but such a measure was not contemplated

* There is some doubt respecting the existence of this office before the Conquest. Lambard affirms that the use of the great seal and the office of chancellor, were brought from Normandy by Edward the Confessor. † Ingulphus, page 37.

without alarm by the thanes and the secular ecclesiastics, who dreaded lest they should be called upon to make restitution to the monasteries of the monastic manors in their possession. The poor, whom the wars and the extortions of the nobility and clergy had reduced to a state of abject destitution, deplored the desolation of those establishments, at the gates of which their fathers had met with temporary relief in periods of famine and misery; and the benevolent spirit of Turketul induced him to take part in their complaints. Still his representations obtained for his cause little more than promises, when in the court of Edmund he met with a young and powerful assistant, who sought his patronage, and whom he honoured with his intimate friendship. This was Dunstan, so well known in history under the name of St. Dunstan. The extraordinary proficiency of this youthful priest, who had been brought up under his uncle, Anselm, archbishop of Canterbury, in all the acquirements of that age, recommended him to the notice of Athelstan. His skill in music and painting was great, and as it excited admiration so it created envy among some ecclesiastics of the court; and their ignorance of these arts as well as other branches of knowledge, then not generally cultivated, but in which he also excelled, he treated with proud contempt. Those whom he offended had sufficient influence to procure his expulsion from court; and though he was shortly after recalled, through the entreaties of his patron Turketul, he never forgot the disgrace, and he even then requested that he might be permitted to retire to the village of Glastonbury, where he passed some years in seclusion, corresponding with few except his patron the chancellor. Whether there had been a monastery at Glastonbury previously to the retirement of Dunstan is uncertain, but he obtained permission from king Edmund to draw together a company of Benedictine monks in that place, over whom he presided. As a testimony of his friendship, Turketul bestowed upon him an elegant chalice, which long afterwards was preserved and known by the name of the chalice of Turketul.

CHAP. 9.

Turketul.

St. Dunstan.

In the following reign of Edred, the third son of Edward the Elder, the chancellor, proceeding on an important mission to the archbishop of York, paid a visit to the desolate abbey of Croyland, where he was hospitably received by three venerable old men, the only remains, with two others, who had retired to the monasteries of Wynton and Malmesbury, of this once populous and wealthy establishment. He was deeply affected by their condition, and on his return to the court, he declared to the king his determination to profess himself a monk, and to endow the abbey of Croyland with all his possessions. He obtained the permission of the monarch with much difficulty, but having resolved not to be frustrated in his intentions, he resigned the chancellorship, and a charter* was granted, at his intercession, to the monastery of Croyland, of which he became the abbot.

Turketul visits Croyland.

Dunstan was of a very different disposition from his friend and patron Turketul, on whose secession from court, he was made the confessor and

St. Dunstan.

* The animosity of the monkish party towards the seculars must have been strong and unrestrained, for in this charter, the new abbot is thus mentioned, "*Turketulus, qui juxta Psalmistæ vocem propheticam, odit Ecclesiam Malignantium, et dilexit decorem domus Domini.*" Turketul, who, according to the prophetic voice of the Psalmist, hated the Church of the Malignants and loved the beauty of the House of the Lord.

CHAP. 9. St. Dunstan.

prime minister of his sovereign. He was ambitious and fond of wealth. Instead of the horror with which Turketul regarded the rich benefices of the secular clergy as snares for the soul, he determined to promote his friends and partisans, the monks, to the highest offices in the church. On this account the monks extolled his sanctity, and in preaching to the people they did not hesitate to attribute to him an abundance of miracles. His popularity was great in every part of the realm, and the secular ecclesiastics, though supported by the nobility, began to tremble at his influence. Secure in the countenance of his sovereign, he was rapidly placing the wealth and power of the realm under the control of the party whose cause he espoused, when the death of Edred afforded to his enemies an opportunity to triumph over him.

Edwy.

Edwy, the nephew of the deceased monarch, was a youth of fourteen, and his council was composed of thanes and secular priests, who immediately called upon Dunstan to account for the sums of money with which Edred had entrusted him. The monks were deprived of all ecclesiastic emoluments and dignities, and were even expelled from some of their monastic establishments, the revenues of which were bestowed upon the secular priests; and in order to take from the monks the aid of their most strenuous champion, Dunstan was banished the realm, and he retired to a monastery in Flanders.

Edgar.

The partisans of the monks, in the meantime, were not idle. In Mercia and all the districts where the Danes had settled they were numerous, and there they raised a considerable force and proclaimed Edgar, the younger brother of Edwy, king in his stead. This measure was probably resolved upon by the advice of Dunstan, who was instantly recalled by the monks acting in the name of Edgar. Their opponents were taken by surprise; the people generally espoused the cause of the monks, and it was rumoured that the king of Denmark was preparing a fleet to assist or to take advantage of the insurrection. Under these circumstances, the council of Edwy was obliged to submit to a compromise, and it was agreed that

Edgar reigns in Mercia.

Edgar should reign in Mercia, which was then understood to comprise Northumbria and East Anglia; and, indeed, the whole country, excepting the small kingdom of Essex, that lay north of the Thames.

Edgar sole Monarch.

Mercia thus became for a short period an independent kingdom, but on the death of Edwy, which happened before he attained his nineteenth year, the whole of England fell under the dominion of his brother Edgar. As he owed to the monks his first elevation to the crown, Edgar's gratitude and interest induced him to listen to their counsels and to favour their objects, and it must be confessed that the country was, during his reign, free from internal commotions and at the same time respected by foreign states. Dunstan, who was made archbishop of Canterbury, continued to repress the party of the nobility and secular clergy, and to promote the monks to dignities in the church and to offices of trust in the state. If we may give credit to the historians of those days, we might venture to say after them, that the reign of Edgar, the wise and peaceable, was the golden age of England.

But the adversaries of the monks, though repressed by the determined

conduct of Edgar, were powerful, and waited only for an opportunity to resume their authority; and this they found on the death of the king, who was succeeded by his son Edward, a youth fourteen years old, to whom Dunstan was appointed the guardian. Among those who opposed the influence of the monks, was Alfer, duke of Mercia, who encouraged the seculars to resist the encroachments of their antagonists, and joining the party of the dowager queen Elfleda, who was desirous that her own son Ethelred should ascend the throne, he endeavoured to despoil the monks of their possessions. From many of the monastic establishments in Mercia, the monks were ejected and the seculars installed in their place, who readily surrendered the manors of the monasteries to the thanes, in order to induce them to defend their cause against the monkish faction. Edward, on whom the monks have bestowed the appellation of martyr, reigned only four years, and was slain by the order of his step-mother, when he accidentally visited her, while he was hunting in the neighbourhood of Corfe castle, which was then her residence. His body was thrown into a well at Warham, but the duke of Mercia, opposed as he had been to the counsellors of the youthful monarch, could not bear that such an indignity should be shown to his corpse. He went, attended by an immense concourse of people, and removed it to the monastery at Shaftesbury.

CHAP. 9.

Edward.

Alfer, Duke of Mercia.

These dissensions between the secular and the regular priesthood divided the people into violent factions, of which aspiring men among the nobility took advantage. Alfer, the duke of Mercia, now protected the secular ecclesiastics, but at the same time, became the patron or rather the proprietor of the manors, which the monasteries were compelled to surrender to their adversaries. Still the monks had their friends, who, with superstitious devotion, continued to enrich the monastic establishments. According to the statement of Ingulphus, the treasure of the abbey of Croyland had accumulated, in the thirty years from its restoration to the death of the abbot Turketul, to the sum of ten thousand pounds, which, if we consider the difference in the value of money, may be estimated at little less than one million and a quarter in our present currency. But the wealth of the monasteries served only as an inducement to the nobles and the court to render them subservient to their wants, and to seek occasions to levy imposts upon them. A great inequality of property ensued. Many of the class of the thanes sunk into poverty and obscurity, while a few became possessed of such immense tracks of territory, that they rivalled one another and excited the jealousy of the sovereign. In such a condition of the nation, the people, impoverished and despised, without attachment to the owners of the land whom they served, and totally estranged from all the professors of religion, whether secular or regular, except hermits and wandering fanatics, who were to be met with in every district, were ready to submit to any change either foreign or domestic. The Saxon power, which for more than four hundred years had been establishing its dominion over this country, sunk into the hands of a turbulent nobility and priesthood: it soon fell prostrate before the Danes, and in less than half a century its nobility was completely extinguished and replaced by a band of adventurers from Normandy. This downfall of the Saxon name and dominion in

Dissensions.

CHAP. 9. England might be the subject of much political reflection, and might be made to afford fearful examples to statesmen in modern times; but we leave it to the general historians of the kingdom, who have, it must be lamented, too much neglected a period which time, as well as the intricacies of its leading events, have combined to involve in considerable obscurity. Our business is with a province and not with the kingdom at large.

In the year 983, which was early in the unfortunate reign of Ethelred II. died Alfer, the powerful duke of Mercia, who, notwithstanding his animosity towards the monks, was a statesman of resolute mind. He sought to give stability to the crown by uniting the nobility and secular clergy in its support, against the more popular faction of the monks and their dependents; we are therefore not surprised to find his memory stigmatized by the monkish historians of that period, who assert that long before his death he was afflicted with the *morbus pediculosus* as a divine punishment for his iniquities.

Alfer, Duke of Mercia.

He was succeeded in his title and domains by his son Alfric, who is mentioned by Ingulphus, as one who enforced the levy of insupportable sums on the monasteries for the payment of tribute to the Danes. In the year 986, Alfric was banished. The cause of his banishment does not appear, but he was probably suspected of carrying on negociations with the invaders. When a peace was made in 991 with the Danish leaders, Alfric, together with earl Ethelward, negociated the terms and engaged for the payment of ten thousand pounds, as a recompense to these marauders for quitting the country. Alfric, after this was recalled and placed in high offices of trust, but he did not desist from his treacherous correspondence with the enemy. The policy of the court was pusillanimous and fraudulent; nor did the nobility feel any compunction at engaging in the most traitorous designs. Duke Alfric, in courting an alliance with the Danes, was undoubtedly actuated by a desire to retain his territories, under a power whom he might foresee to be destined to drive from the throne a sovereign who had lost the confidence of the people; and it is not impossible that he might look forward to the separation of Mercia, and the other Danish districts from the Saxon crown. Whatever were his views, he contrived to obtain from Ethelred the command of a fleet, which that monarch had prepared to defend the coast; and then, being in sight of the enemy, he sailed privately away, and left the vessels with which he was entrusted to the mercy of the foe. The fleet had been equipped out of the money which he had himself levied upon the monasteries, and of which he and the king were suspected to have shared a considerable portion. It is only from this circumstance that we can account for his being speedily again restored to the favour of Ethelred, who entrusted him with the command of a large and well-appointed army, destined to oppose Sweyn, king of Denmark, who, with a fleet of three hundred sail, had landed upon the coast of Cornwall, and marched directly against Exeter. That city was taken and made a heap of ashes, and Sweyn marched with his victorious troops through the counties of Wiltshire and Hampshire, laying waste the country in his progress. The inhabitants of those districts, driven from their homes, joined the advancing army under the command of the duke

Alfric, Duke of Mercia.

of Mercia, and expectation was raised that the invader would be defeated and that the spoils with which his camp was laden would be taken from him. The armies met on the borders of Hampshire, but just as the attack was about to commence, duke Alfric feigned himself to be taken sick very suddenly, and led off the army under his command, in such a direction that the king of Denmark had time to take Salisbury and other towns, which having pillaged and consumed to ashes, he marched unmolested to his ships and set sail with his booty to his native country.

Alfric, Duke of Mercia.

Whether it was in consequence of this conduct that Alfric was disgraced, and deprived of the dukedom of Mercia, is uncertain, but we find him in the year 1007, dispossessed of his territories, which were bestowed on Edric, surnamed Streon, or the Acquirer. This man was of low origin, but by the acuteness and versatility of his mind, had attained so complete an influence over his sovereign, that the most manifest proofs of his treachery could never wholly eradicate the favour and confidence to which he owed his elevation. Ethelred bestowed upon him his daughter Edgitha in marriage, and appointed Brithric, the brother of Edric, to the command of the fleet destined to act against the Danes. These two brothers employed their interest with the infatuated monarch in ruining many of the wealthiest thanes, whose riches and possessions were confiscated in consequence of the charges brought against them. Among these was Wolnoth, earl of Kent, the father of the celebrated Goodwin, afterwards as distinguished for his immense wealth as for his eminent treachery, which seems to be the prevailing characteristic of the Saxon nobility of that period. Wolnoth was nearly related to the two brothers, for Edric Streon is by many historians stated to be the uncle of Goodwin.* It is not improbable that Wolnoth had married a sister of the two brothers. In consequence of accusations brought against him, Wolnoth fled from a prosecution in which he suspected that his destruction was previously concerted, and being joined by several leaders of the fleet under Brithric, with their vessels, he infested the coasts, and particularly levied large contributions from Mercia and East Anglia. Brithric, by the direction of Edric, who was desirous to preserve his own domains from spoliation, set sail with the large and well-appointed fleet destined to protect the coast from the ravages of the Danes, to chastise their private enemy. A storm arose: the vessels were scattered and many of them wrecked: Brithric was lost, and most of the surviving captains were persuaded to unite with Wolnoth in his piratical enterprises. In fact, this species of piracy along the coasts, appears, from the accounts of the old historians, to have become quite common; and it is doubtful whether the country suffered more from the Danes than from the armaments of the greedy and ambitious thanes, who were ever ready to join and participate in the booty of the invaders.

Edric Streon, Duke of Mercia.

The Danes were ever ready to take advantage of the disorders of a country where a few powerful noblemen controlled the king and were intent upon ruining one another. In the year 1009, two large fleets of these invaders arrived on the coasts of England; one of which, under the com-

* The genealogy given by Dugdale can scarcely be correct, for he makes three generations between Edric and Goodwin, that is, in less than twenty-five years.

CHAP. 9. Invasions of the Danes.

mand of Heming and Anlaff, proceeded to the isle of Thanet. The forces disembarked from these vessels were numerous, and the most fruitful parts of Kent were ravaged by them. Canterbury purchased their temporary forbearance with the sum of three thousand pounds. They then sailed to the Isle of Wight, and laid waste the southern provinces between the sea and the Thames. Ethelred raised an army to oppose them, and entrusted it to his son-in-law and favourite, Edric, who, being in communication with the Danish chiefs, drew his troops around London instead of intercepting the enemy, whom he permitted to march laden with their booty, through Hampshire, Surrey and Kent, and to fortify themselves in the isle of Thanet. There they established their winter quarters, making occasional incursions into Kent and Essex. At the ensuing spring they were joined by the East Anglians, who were chiefly of Danish origin, and laying siege to Canterbury, they speedily became masters of that city, which they reduced to a heap of ashes. To save London from the same fate, the sum of forty-eight thousand pounds was given them, with which and with the enormous booty they had acquired, they at length consented to return to Denmark. Such a retreat was sure to be followed by a fresh invasion.

Sweyn.

Sweyn, the king of Denmark, had long kept up a correspondence with some of the leading men in the court of Ethelred, and particularly with those whose domains were situate in what may be termed the Danish provinces. The treacherous duke of Mercia privately encouraged his views, and prepared his success by the insidious counsels with which he swayed the weak mind of his royal father-in-law. A more powerful fleet than ever was prepared in Denmark, and Sweyn disembarked an army destined rather for conquest than devastation on the shores of the Humber. All Northumbria and Mercia instantly submitted to him, for the troops of Ethelred, by the advice of Edric, were employed in small bodies along the southern coasts of the kingdom. Speedily supplied with cavalry, in which his forces were at first deficient, his march through East Anglia was a triumphant procession, and he was saluted as sovereign in every town. To his son Canute he committed the government of these domains, and hastened to besiege London, where Ethelred had endeavoured to fortify himself. While he lay before the capital, he laid the whole surrounding country under contributions, which were enforced by sanguinary devastations: the provincial kingdom of Wessex, which was considered more immediately as the hereditary domain of Ethelred, was completely ravaged, and its Saxon population put to the sword. The monasteries even in the Danish territories were not spared: their treasures were seized, and when these were exhausted, the monks mortgaged their manors to the duke of Mercia, who, under pretence of protecting them, settled his own military dependents, of whom he had great numbers in his pay, upon them. Thus enriched and re-enforced, Sweyn pressed the siege of London more closely, and the unhappy Ethelred was on the point of being delivered as a prisoner, by his treacherous attendants, into the hands of the Danish conqueror, when he found means to escape privately to Normandy. London instantly surrendered, and Sweyn was proclaimed king of all England. His reign was short: in a few months he expired suddenly, leaving the crowns of Denmark and England to his son Canute.

Siege of London.

Apprehensive that the throne of Denmark would, in his absence, be seized upon by his younger brother, Canute quitted for a time the newly acquired realm of England; and Ethelred, who had been recalled immediately upon the death of Sweyn, by his Saxon subjects, was re-instated in his capital and surrounded by a considerable body of troops. Edric, the treacherous Duke of Mercia, again sought and procured his favour; and as a proof to the sovereign of his devotion to his interests, he planned and perpetrated a perfidious design against two powerful Danish chieftains. These, whose names were Morcard and Sifferth, having been summoned to attend a council of Saxons and Danes, held at Oxford, were invited by Edric to a feast, at which they and several others of Danish extraction were murdered. After their death, they were accused of treason, and their possessions were accordingly confiscated.

Canute.

Ethelred restored.

But while Edric by such means as these recovered the confidence of his father-in-law, he maintained an intercourse with Canute, who, having assured himself of the allegiance of his hereditary subjects, had landed at Sandwich with a numerous army. To oppose his progress, an army was raised by Ethelred, who entrusted it to the joint command of his son Edmund and his son-in-law Edric Streon.

It is difficult to understand how the duke of Mercia, after repeated instances of treachery, should still be able to recover the confidence of Ethelred, and even of prince Edmund. On the death of the former, Edmund was proclaimed king by the Saxons, but the Danish provinces, including the greater part of Mercia, acknowledged the sovereignty of Canute, who immediately laid siege to London. During the siege of that metropolis, about the midsummer of the year 1016, a battle was fought,* in which each of the rival princes, at the head of his troops, gave signal proofs of his conduct and valour; and, after a long and severe contest, the armies withdrew, as if by common consent, from the field of battle, having each sustained nearly an equal loss. Duke Edric, on this occasion, fought on the side of the Danes, and alarmed at perceiving that the English, from attachment to Edmund, disputed the victory with great firmness, had recourse to a stratagem which had nearly proved successful. He cut off the head of a soldier, named Osmer, who very much resembled Edmund, and fixing it upon his spear, he rode towards the English ranks, exclaiming, "Fly, miscreants—here is the head of the king to whom you adhere!" At this sight, the troops began to recede, when Edmund himself, without his helmet, rode up to them, and by his presence and his words revived their confidence and courage.

Edmund Ironside.

The siege of London continued, and, during the space of one year, five pitched battles were fought. In these battles, and in the transactions of the period, of which we have a very confused account in the monkish historians, we find duke Edric, alternately in the confidence of Canute and of Edmund. In the fatal battle which was fought at Ashdon, near Walden in Essex, this traitor held a principal command in the troops of his royal brother-in-law, and in the heat of the engagement, he led off his Mercians

Battle of Ashdon.

* It is doubtful where this battle was fought; but it is generally called the battle of Shire-stone (probably Shirston in Wiltshire.) It lasted two days.

CHAP. 9. and joined the Danes. The English ranks were instantly broken, and, throwing down their arms, they betook themselves to flight. In this battle, Alfric, the former duke of Mercia, who had been disgraced and banished by Ethelred for treachery of a similar nature, was slain, fighting by the side of Edmund, to whom he had found means to be reconciled. Many of the English thanes fell in the slaughter that ensued.

Death of Alfric.

London still held out against the Danish sovereign, and Edmund, in a short time, was able to draw together a very considerable army; but the people began to be weary of a contest, in which one half of the kingdom was arrayed against the other half, and in which it seemed that neither the Saxon nor the Danish race could be secure until the one or the other should be completely extirpated. It was accordingly proposed, that all the country south of the Thames, together with London and the small kingdom of Essex, should be assigned to Edmund; and that Canute should reign over Mercia, Northumbria and East Anglia. Edmund did not long enjoy the quiet possession even of this portion of the realm of his ancestors. His traitorous brother-in-law, the duke of Mercia, who had become important chiefly by his power of alternately betraying the contending sovereigns, apprehending that their friendship would be the forerunner of his disgrace, employed two of Edmund's attendants to assassinate him,* and immediately left the court to convey to Canute the first intelligence of the event, and to proclaim the Danish prince sovereign of the whole island. Canute, who profited by the treachery, dissembled for a time his detestation of a traitor, who, by his last crime, had rendered all future services of a similar nature unnecessary. He thanked him for his zeal, and promised to advance him above all the peers of the realm.

England divided between Edmund and Canute.

Canute sole Monarch.

No sooner was Canute securely fixed upon the throne, than the duke of Mercia began to feel his displeasure. He seems to have expected the full restoration of Mercia, with such rank and power of sovereignty as had been granted by Alfred to the husband of his daughter Ethelfrida; and, when Canute treated his claims and remonstrances with contempt, he had the audacity to tell that prince, that he was indebted to his arts rather than to his own valour for the crown he wore, and boasted of the murder of Edmund. This was said in the open court, at which many Saxons, whose regard Canute was anxious to conciliate, were present; and he instantly replied—"Thou hast then condemned thyself, thou traitor to thy natural lord, thy kinsman, and thy prince!" Edric was seized and bound upon the spot. The king then commanded that he should be beheaded and his body thrown into the Thames, and that the head should be fixed upon the gate at the entrance of the palace, "for," said he, "I promised to advance him above all the peers of the realm."

Death of Edric Streon.

Leofwine, Duke of Mercia.

The successor to Edric, in the dukedom or earldom of Mercia, was Leofwine, descended from Leofric, earl of Chester, who distinguished himself in the reign of Ethelbald. Leofwine did not long enjoy this dignity, but, dying, left issue three sons, the eldest of whom was named Leofric. The second, named Norman, was in high military trust under Edric Streon, and on the execution of that nobleman, fell a victim to the

* Some historians relate, that Edric employed his own son, who stabbed Edmund with a knife struck into his fundament when he was easing nature.

violence of the people, although he had not participated in the crimes of his patron. CHAP. 9.

Leofric was earl of Chester during the lifetime of his father, and enjoyed the confidence of king Canute, at whose death he called a general assembly in Mercia, and by his influence secured the immediate succession of the crown to Harold, surnamed Harefoot. This was done with the consent of earl Goodwin, who, by the favour of Canute, had become the most powerful nobleman in the realm. On the death of Harold, his half-brother, Hardicanute, was called to the throne, who, during a short reign of three years, rendered himself odious by his cruelty, avarice and gluttony. On one occasion he laid an exorbitant tax upon the kingdom, which the people of Worcester resisted, and slew two of the military agents who were employed in collecting it. An insurrection ensued, which required the united endeavours of Leofric, duke of Mercia, Goodwin, duke of Wessex, and Siward, earl of Northumbria, to appease. These three powerful noblemen marched against the city of Worcester, and in obedience to the commands of the tyrant they burned it to the ground, after having given it up for four successive days to the plunder of the soldiery. Leofric, Duke of Mercia.

Edward, surnamed the Confessor, was on the death of Hardicanute, established on the throne by the influence of the three great peers just mentioned, who seem to have possessed among themselves the whole power of the realm. Goodwin, duke of Wessex, hesitated to espouse the cause of Edward until that prince had sworn to make his daughter Editha the sharer of his throne. On his accession, Edward could not disguise his hatred of Goodwin, of whom, however, he stood in such dread, that, after deferring his nuptials upon various pretences for two years, he at length married his daughter, and found himself continually compelled to yield to the counsels of her father. The authority assumed and exercised by Goodwin was counteracted by the joint endeavours of Siward, earl of Northumbria, and Leofric, duke of Mercia; the former of whom bore a high reputation for valour and wisdom, while the latter was so esteemed for his piety, charity and wise administration, that his authority throughout Mercia equalled that of an independent sovereign. In the troubles excited by Goodwin and his aspiring family, Leofric always employed his talents and his power in support of the monarch, whose mind was feeble and contracted, ill-suited to the contentions with which he was surrounded, and whose strongest passion was hatred of the very man whose daughter he had been compelled to make his queen. So extreme was this hatred, that although his consort was beautiful, amiable and intelligent, he refrained from her bed, and frequently caused her to be confined in the cell of a monastery. Edward the Confessor.

Having been brought up in Normandy, Edward had formed his early friendships and habits in the court of that dukedom, and he greatly alienated the affections of his English subjects by the encouragement he bestowed upon those foreigners. Leofric remonstrated in vain, and his son Algar, a spirited youth, openly expressed his disgust, and connected himself with Harold, son of Goodwin, who subsequently married his daughter.* On the death

* Dugdale says that Algitha, the wife of Harold, was the daughter of Algar: Rapin and other writers say the sister.

CHAP. 9. Edward the Confessor.

of Goodwin, Harold became duke of Wessex, and the earldom of the East Saxons, previously held by Harold, was bestowed upon Algar. In what manner this alliance had provoked the jealousy of Edward and his Norman favourites, is not explained by any particular charge against Algar, but we find that in 1055, he was banished, after deliberations held by a general council in London. Irritated at this sentence, he sailed to Ireland with eighteen vessels, and uniting himself with some Norwegian pirates, committed extensive devastations along the western coasts of the kingdom. He then formed an alliance with Griffin,* king of Wales, and invaded Herefordshire with a powerful army which that sovereign had raised and placed under his command. He was opposed by Ranulph de Mantes, who had been appointed earl of that district, but him he speedily defeated, and became master of Hereford, which he plundered, setting fire to the cathedral and monastery. His farther progress was checked by the advance of Harold, at the head of a large body of forces which he had raised in his own territories. Algar made no resistance, but trusting to the generosity of and his influence with Harold, a negociation was entered into; and his Welsh auxiliaries being dismissed, Algar was restored to his earldom.

Death of Leofric.

It was not long after the return of his son, that Leofric died, who is spoken of by the historians of that period, as a man of pacific counsels, distinguished at once for his generosity and his piety. His wife was the celebrated Godiva, a lady of extraordinary beauty and great devotion, descended from an ancient Saxon family, surnamed Thorold, who had large possessions and honours in Lincolnshire, and had been, from its earliest establishment, great benefactors to the monastery of Croyland. Thorold, the brother of Godiva, founded the abbey of Spalding, which was attached to Croyland, and in the deed of gift, which was executed in the year 1051, he styles himself, Thorold of Bukenhale, and states that he acts by the permission of his most noble lord, Leofric, earl of Leicester, and of the most noble countess Godiva, his sister, the wife of Leofric, and with consent and good will of his lord and kinsman, earl Algar, their eldest son and heir.—Leofric himself was the founder and enricher of many monasteries; "among which," says Ingulphus, "at the instigation of his wife, by name Godiva, the most lovely as regards the body and the most sanctified with respect to the heart, of woman kind, he immensely enriched the monastery of Coventry, with great and numerous endowments." The inhabitants of Coventry were particularly the objects of her esteem and patronage, and she took many opportunities to second the prayers and petitions of the burghers to be relieved from various harsh customs and taxes which injured their trade and reduced some of them to a state of servitude. On one occasion, when she had implored Leofric by the love of God and the Virgin Mary to give freedom to the citizens, he told her he could no more part with what he considered belonged to the honour of his authority, than she could herself do an outrage to the delicacy of her modesty; and as she continued pertinaciously to argue the point with him, he declared that it was no more his part to remit these appendages to his

Godiva, benefactress of Coventry.

* Griffin or Griffith married Algar's daughter, who, on the death of the Welsh prince, which happened in less than two years, became the wife of Harold.

Story of Godiva.

state, than it would be for her to ride naked from one end of Coventry to the other. To his surprise, she took him at his word, and asserted that he was too much respected by the people to require such signs of their submission, and in like manner was she herself so much respected by them, that she might safely ride naked from one end of Coventry to the other, in perfect confidence that not an eye in the city would insult her by a forbidden gaze. He smiled, and told her that when she had ridden through the town naked, he would comply with the petition of the citizens. "I accept the condition," said she, "if I have your leave to perform it." He gave his permission. A day was appointed, and proclamation was made in the name of Godiva, that all the people should keep within doors and close their windows. A palfrey, caparisoned with a cloth of gold, was led out by twelve maidens, and the countess, almost entirely veiled in a profusion of her own hair, mounted the steed and performed the task. It is said that one unhappy mortal could neither restrain his curiosity nor his indiscretion. Poor Tom of Coventry not only peeped through a crevice in the shutter, but also, struck with this glimpse at female perfection, gave vent to his admiration in an unlucky exclamation. He was seized upon and put to death by the more respectful, or at least the more discreet, men of Coventry.—On her return to her husband, he granted the city a charter of freedom "*a servitute et malis costumis et exactionibus*," from servitude, injurious customs and exactions. In memory of this transaction a procession is made yearly in Coventry, in which a woman is hired to personate the virtuous Godiva. The picture of Leofric and his lady (says Dugdale) was set up in a south window of Trinity church, Coventry, about king Richard the Second's time: he, in his right hand holding a charter (which he seemed to present to her) with these words written thereon—"I *Luriche*, for love of *Thee*, Do make *Coventrie*, toll-free."

To the monastery of Coventry, the countess Godiva gave her whole treasure, and employed artificers in the precious metals to convert it into crosses and images of saints and a variety of scriptural ornaments. She also founded the monastery of Stowe near Lincoln, which she endowed with various manors.

Algar, Duke of Mercia.

Algar succeeded his father in the dukedom of Mercia, but he survived him no more than two years. He kept up a connexion with the Welsh, and employed the Norwegian pirates, for which he was accused and sentenced to banishment, but Harold was again prevailed upon to exert his influence in his behalf, and he was restored to his dukedom, which he possessed only for a few months, when he departed this life and was buried at Coventry near the grave of his father. He left two sons, Edwyn and Morcar. His possessions were very extensive in all the midland counties.

Edwin, Duke of Mercia.

Edwin, the eldest son of Algar, succeeded him as duke of Mercia; and Morcar, the younger son of Algar, had, upon the banishment of Tosti, the violent and rebellious brother of Harold, been made earl of Northumberland. On the accession of Harold to the crown, upon the death of Edward the Confessor, the first who attempted to disturb his government was his brother Tosti. He immediately went to the court of William, duke of Normandy, in order to concert with him the means of dethroning

CHAP. 9. Edwin, Duke of Mercia.

Harold. Earl Tosti and William of Normandy had married sisters, the daughters of the earl of Flanders. Being furnished with ships by these powerful relatives, Tosti first attacked and plundered the Isle of Wight, and then sailing northward he entered the Humber and ravaged the country on its banks with fire and sword. The two brothers, Edwin, duke of Mercia, and Morcar, earl of Northumberland, united their forces, and marching against him compelled him to retreat into Scotland, from which country he shortly afterwards sailed to Norway. There he persuaded the king of Norway, Harold Harfager, to turn his warlike preparations against England, which he assured him would be an easy conquest. In consequence of these representations, the Norwegian fleet, accompanied by the vessels under the command of Tosti, sailed without delay, and entered the Tyne. Having there plundered the country on both sides the river, they sailed to the Humber and landed their forces at Richale, in Yorkshire. The two powerful brothers, Edwin and Morcar, endeavoured to oppose the invaders, and drew together a body of forces, with which they attacked the enemy at Tulferd, but were totally defeated. This battle was fought on the festival of St. Matthias, and at the commencement Edwin and Morcar were successful. Five days afterwards Harold advanced at the head of a large army. The Norwegians had taken the city of York, and proud of their victorious career, were proceeding to accomplish the conquest of Northumbria. Harold came upon them at Stamford bridge, on the river Derwent. The Norwegians defended this bridge with astonishing valour, but Harold becoming master of it, an obstinate and sanguinary battle ensued, which lasted eight hours, and in which, it is computed, that not less than sixty thousand men were engaged on each side. The victory obtained by Harold was complete. Both his brother Tosti and the king of Norway were slain.

Battle of Hastings.

It does not appear that the two brave brothers, Edwin and Morcar, were present at the fatal battle of Hastings, in which their brother-in-law, Harold, lost his crown and his life. Dugdale states from Knighton, that a misunderstanding had occurred between these two brothers and king Harold, on account of his refusing them their due share of the spoil obtained at the battle of Stamford bridge. No sooner, however, were they informed of the event that was to place England under the dominion of the duke of Normandy, than they hastened to London, and took the command of the remains of the fugitive army. According to some historians, these brothers presented themselves severally to the choice of the people, promising to defend their liberties against the conqueror; and it is also related that they sent for their sister, the queen, and her infant son, with the expectation of exciting the Londoners in her favour.

William, Duke of Normandy.

While William, after the battle of Hastings, was engaged in the siege of Dover, and in laying waste the counties of Sussex, Kent and Hampshire, the city of London was as much distracted by internal dissensions as by the terror of his arms. Edwin and Morcar endeavoured to calm the agitation, and waiving either their own claims to the crown or that of their infant nephew, they strove to consolidate a party in favour of Edgar Atheling, the grandson of Edmund Ironside, and the only surviving lineal male

descendant of the ancient Saxon princes. In this design they were opposed chiefly by the clergy; and the two archbishops, who were then both within the city, strongly insisted upon submission to the duke of Normandy, who had the reputation of a religious prince, well disposed to the church. In the meantime, William encamped at Southwark, and there, Morcar and Edwin instigated their party to attack him. This was done with so much skill and courage, that the duke retreated to Wallingford, and in revenge for this discomfiture, laid waste the country around London. Could the archbishops have been prevailed upon to crown Edgar, it is highly probable that forces would have started forth to support his right, in all parts of the kingdom, but these prelates were wholly in the interests of the duke of Normandy. Edwin and Morcar perceived that the surrender of the capital to the conqueror was inevitable, and withdrew with their sister into the north. No sooner were they gone than the two archbishops persuaded prince Edgar to make his submission to the duke of Normandy, and accompanied him for this purpose to Berkhamstead, then the residence of the conqueror. On the Christmas day following, William was crowned in London.

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William, Duke of Normandy.

The moderation with which the conqueror began his reign, induced many of the English to expect that the kingdom would enjoy tranquillity under his government, and to persuade themselves that the dissensions and tumults that had ever since the reign of Ethelred II. distracted the land would be extinguished. Under this impression Edwin and Morcar desisted from their levies in the north, and repaired to the court of William at Barking in Essex, and made their submission to him. William received them in the most cordial manner, and in their presence bestowed upon prince Edgar various marks of his confidence, and invested him with the personal foefs of his royal ancestors. Having thus, with consummate art, quieted the apprehensions of these powerful noblemen, whose enmity, determinately exerted, might have occasioned him much difficulty in securing his recent conquest, the king prepared to revisit his hereditary dukedom, in the triumphant character of a regal conqueror.

William the Conqueror.

William has been thought imprudent in leaving England, apparently from none but ostentatious motives, before he had completely established his authority. His visit to Normandy was, however, far from being impolitic. He committed the government of his new acquisition to his uterine brother, Odo, bishop of Bayeux, and to William Fitz Osberne, who he knew were men likely to incur all the odium of that severity which it might be necessary, under the unsettled circumstances of the kingdom, to enforce; and he took with him to Normandy, prince Edgar, Edwin and his brother Morcar, together with a large body of the Saxon nobility. Thus he not only secured himself against the danger of their influence, but excited the admiration and attachment of his natural subjects by the display of so vast a train of illustrious hostages at the Norman court. During his absence, the tyranny of the regents made the unhappy English anxious for his return, for, from the specious moderation of his former conduct, it was not believed that he could have authorized the excessive exactions and seizures of estates which were enforced with such rigour, that the indigna-

CHAP. 9. William the Conqueror.

tion of the people was aroused, and they wanted but the presence of such men as Edwin and his brother Morcar to throw off the Norman yoke. William had intelligence of these matters, but it only induced him to prolong his stay in Normandy. He had promised the Norman adventurers who had taken part in his expedition at their own expense, to recompense them with lands in England, and he therefore left the business of commencing the cruel confiscations necessary to satisfy some of the most urgent of his greedy followers, in the hands of Odo and Fitz Osberne, while he soothed the English nobility with assurances of his regard, and prevented them from being acquainted with the actual state of their country. To Waltheoff, the son of the celebrated earl Siward, of Northumbria, he gave his niece Judith in marriage, and he promised to Edwin, duke of Mercia and earl of Chester, one of his daughters.

On the return of William from Normandy, his ears were assailed with the complaints of the English, to which he paid little attention, but hastened to crush the insurrections which had broken out in Devonshire and in other counties. Gradually he threw off the mask and openly confirmed the confiscations that had been made by the regents during his absence, and even nominated commissioners to enquire the names of those who had borne arms against him at the battle of Hastings. An inquisition of such a nature could not but awaken the apprehensions of all the English nobility. Edwin and Morcar were too late aware of their error in confiding in a prince who scarcely any longer disguised that he acknowledged no other right than that of power and conquest. Edwin, to whom the king had promised one of his daughters, saw some of his own manors seized and bestowed upon Normans, while his representations, made to the conqueror upon the subject, were slighted and procrastinated. He therefore listened to the appeals and remonstrances of the English, and encouraged the inclination to a general revolt. His brother Morcar entered into his views, and proceeding together to the north, they raised forces in Mercia and Northumberland, and were joined by a large body of troops under Blethwin, king of Wales, who was the son of their sister Editha, by her first husband.

The vigilance and rapidity of preparation with which William encountered this revolt prevented its success. He kept the south of the kingdom in terror by the number and strength of his castles, in all of which, troops were in readiness to repress the earliest signs of insurrection; and he sent Henry de Beaumont, whom he had created earl of Warwick, to take possession of the fortresses in that district, and built a castle at Nottingham. The two brothers, Edwin and Morcar, perceived that their project was hopeless, and when the king sent messengers to them with proffers of his favour, they acceded to his wishes and promised to use their influence in repressing the rebellion and in restoring peace to the country. The conduct of the king towards either themselves or their countrymen was, however, not such as to justify the confidence they had shown in this submission. He marched in spite of their remonstrances to York, on the inhabitants of which place he levied an excessive fine, and built two castles in that city. He caused a great number of the English to be imprisoned and

gave their estates to Normans, and erected castles in all the suspected counties.

The noble brothers, Edwin and Morcar, were convinced that no reliance was to be placed on the favour of the king. They shortly withdrew from the court, and Morcar joined a party of northern lords who had collected forces, with which they kept the Normans, on whom their possessions had been conferred, in continual alarm. His own territories, particularly his earldom, had been entrusted by the conqueror to the government of Robert Cummin, a Norman of a fierce and brutal character. The Northumbrians under the command of Morcar and his associates determined to resist their Norman governor, and on his arrival at the head of about seven hundred men, they compelled him to take refuge in the city of Durham, where he was slain by the populace. To support the cause, and to make a more formidable resistance to the Normans, the Northumbrian lords solicited assistance from Denmark, which was instantly granted. A fleet, commanded by the brother of the Danish king, arrived in a short time in the Humber. The Danes were joined immediately by some of the most distinguished of the English nobles, and from Scotland, the earls Gospatric and Marleswein led a considerable re-enforcement, and brought with them prince Edgar Atheling, who had escaped to the court of the Scottish monarch, and whom they were desirous of placing on the English throne. The city of York was speedily taken by the combined army of the Danes and the English insurgents. The Norman garrison, consisting of three thousand men, were put to the sword, and a great part of the city was reduced to ashes. Earl Waltheoff, who, notwithstanding his alliance with the conqueror, had taken a principal part in the insurrection, fixed the head quarters of the English at York, while the Danes encamped between the Ouse and the Humber.

William was so alarmed at this enterprize, that he sent his queen with her children into Normandy, and while he prepared to march towards the north, he endeavoured to conciliate the minds of the southern nobles, some of whom he restored to their estates. As the winter approached, and the Danes remained beyond the Humber, engaged in predatory excursions upon those whom they came to aid, the king employed emissaries, who privately offered their leader a sum of money, and intimated to him that he might ravage the possessions of the English nobles along the coast of Lincolnshire and Norfolk without interruption. These terms were accepted, and on the approach of spring the Danes retired. William then prepared to suppress the insurrection. He first marched to Oxford and reduced it to obedience, and then to Nottingham, the country around which he laid waste, depopulating whole districts with fire and sword. The terrified multitudes fled before him to York, where they sought protection under earls Waltheoff, Morcar and the other leaders, who began to dread their numbers on account of the deficiency of provisions, for the Danes in their retreat had carried off both cattle and corn. Still earl Waltheoff and his companions determined to stand a siege. The resistance they made was long and desperate. William began to despair of success, particularly as he was frequently compelled to employ his forces in repressing other

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partial insurrections, which the English, encouraged by the intrepidity of the besieged, attempted in various parts of the kingdom. But famine aided his arms. The miseries which were everywhere experienced surpass the powers of description. Throughout the districts north of the Trent, the lands were untilled. The inhabitants of Mercia and Northumbria, although they assailed his troops, in all the wretched despair of hunger, died in the fields and highways around him. The garrison of York was compelled to subsist on the bodies of their companions, and their numbers were thinned by the ravages of disease. In these circumstances Waltheoff capitulated, and was again received, on honourable terms, into the favour of the king. William then marched onwards to Durham, and the ravages he committed proved that he had determined to exterminate the English and to supply their places with his Norman followers, to whom he gave their lands, having reduced the surviving population to the most abject condition of slavery. To his nephew, Hugh Lupus, he gave the palatinate of Chester, and the rest of the possessions of Edwin he bestowed upon his son-in-law, Alan, the duke of Bretagne. Henry de Ferrariis received Tutbury, besides sundry manors in Staffordshire and Derbyshire, and other territories held by the English were confiscated and given to Normans.

During the siege of York, prince Edgar had returned to Scotland, where he found refuge with Malcolm, who had espoused his sister Margaret. The two noble brothers, Edwin and Morcar, sought safety in concealment: they retired to the monastery of St. Albans, where they found many other English noblemen, who, under the direction of the abbot, were devising means to recover the liberties of their country. The abbot was a man of ardour and prudence. His monks were despatched to different parts of the country, and by their instigations a numerous army was ready to assemble at the shortest notice. Edwin undertook to apprize the king of Scotland of the strength and views of the conspirators, and repaired to the court of Malcolm. He had hardly departed, when the plot became known to the conqueror, who immediately summoned the most influential of the English nobility to meet him at Berkhamstead. He there conferred with them in the most amicable manner: restored to some of them their estates, and solemnly swore, upon the holy Evangelists, to establish the ancient laws of the realm, and strictly to observe the statutes made under the reign of Edward the Confessor. Satisfied by his promises and his oath, they withdrew themselves from the conspiracy and dismissed their troops; but they had no sooner given him this testimony of their confidence, than he seized upon the persons of many and banished or imprisoned the rest. The abbot of St. Albans, with earl Morcar, sought refuge in the isle of Ely.

In that retreat they found Hereward, a warrior of distinguished prowess and abilities. He was uncle to the two noble brothers, Edwin and Morcar, and nephew to the venerable Brand, abbot of Peterborough. In his youth he had been banished for offences resulting from his incontrollable independence, and had in Flanders raised himself to eminence by his heroic actions, where he espoused a princess of wealth and beauty. Although he had taken little share in the troubles of his native country, his patrimonial possessions had been seized, and when he appeared at the court of William to re-claim them, he was dismissed with indignity. With a mind burning

for revenge he sought his aged uncle, to whose representations he attentively gave ear, and swore to emancipate England from Norman domination. The isle of Ely, surrounded by a wide morass, was a place of considerable security, for it was too extensive to be encompassed by any besiegers, and afforded spots for the concealment of both men and arms in its well-wooded marshes. Hither the discontented English flocked daily, and Hereward was unanimously chosen their chief. As he had never been knighted according to the Saxon ritual, he underwent that ceremony under the direction of the venerable abbot. He made confession of his sins, received absolution, and having passed a night in prayer and meditation, he was invested with his sword, in the presence of the assembled confederates, at the conclusion of high mass. The scene was presented as a union of piety and patriotism, and the noble conspirators were animated with cheering expectations.

Siege of Ely.

Hereward immediately began to perform with activity and vigilance the duties of the station conferred upon him. He fortified the most accessible parts of the morass with citadels, and caused stores of provisions to be brought from every quarter. His forces were rapidly increasing, and he was about to march forth and proclaim prince Edgar as king of England, when William drew near at the head of a large army. The conqueror was surprised to meet with the numerous obstacles which he had to encounter. He was assailed by continual sallies from the citadels, and was compelled to sit down on the outside of a marshy district, which art as well as nature had rendered impassable. He then had recourse to the arts of dissimulation, and having means of communicating with some of the confederate nobles, he renewed his promises of restoring to them their estates and treating them with respect. Some of them listened to his persuasions and deserted their brave leader. An apprehension of treachery paralyzed the efforts of the rest. The monks of Ely began to be alarmed for the manors they held beyond the limits of the island, and they sent to implore the king to spare their property, which he was causing either to be destroyed or to be given as prizes to his Norman soldiers. The artful conqueror knew well how to manage such advantages. He entered into a negotiation with Thurstan, who had been appointed successor to the venerable abbot Brand, on his death, which happened a few days after the consecration of his nephew Hereward as the champion of English freedom. Thurstan, in the name of the monks, promised to put the king in possession of the isle and to pay him a thousand marks, if their manors should be restored to them. The offer was accepted. The treacherous abbot, by means which the old historians have not detailed, contrived to deliver the isle to William. The troops of the king entered by night, and instantly made earl Morcar and Egelwin, the bishop of Durham, their prisoners. A conflict ensued, and Hereward, with a body of his personal adherents, cut his way through the opposing Normans and escaped to Flanders.

Morcar made prisoner.

Expedition and fate of Edgar.

Edwin, on hearing of his brother's seizure and imprisonment, continued to urge the king of Scotland to levy troops and to support the claims of prince Edgar to the English crown, and when Malcolm intimated the success of the conqueror and the instability of the English nobles, the un-

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happy duke of Mercia hastened to Wales, and prevailed upon his nephew to entrust him with a vessel and a body of men, with which he might attempt the liberation of his brother Morcar. The coast to which Edwin directed his course is not mentioned by the old historians, but it is stated that he was betrayed by three brothers, who were his principal military officers, into the hands of the Normans. He had landed and had been joined by the inhabitants of the district when the Norman garrison received intelligence respecting him, and sallying out, pursued him and a band of twenty horsemen who attended him, to the shore. There the tide coming in with a heavy surf, prevented him from regaining his vessel and hemmed him in between the sea and the projecting rocks. Escape was impossible, but he would not surrender to the Norman soldiers, who were rushing down upon him and his few adherents. After a severe conflict, he fell, covered with wounds, into the waves which had risen high over the bank on which he still strove to defend himself. He was lamented even by his enemies, and the conqueror himself was heard to declare, with tears, that the death of this brave and benevolent noble, was the greatest calamity that England had sustained.—Earl Morcar was liberated, by the dying command of the conqueror, but he was again imprisoned by William Rufus and ended his days in his dungeon.

CHAPTER X.

Historical incidents, in which the inhabitants and the great baronial and other distinguished persons of Derbyshire are connected with the general history of the kingdom.

ON the death of Edwin, earl or duke of Mercia (as he is indifferently styled by the old historians) the Mercian name was lost even as a titular distinction. Few particulars relative to Derbyshire, during the period we have been describing, are recorded, and we have, consequently, considered it only as a part of the Mercian territory, in the government of which it was incorporated. We have already observed that its chief town was one of the five considerable posts held by the Danes in the middle districts, and from which they were repeatedly driven by the Saxon sovereigns. Derby seems, at that era, to have been a mart of some importance. It was privileged to coin money; for coins of the reigns of Athelstan and Edgar have been discovered, impressed with its ancient name *(Deoraby)* and at the time of Edward the Confessor, there were fourteen water-mills within its boundaries. In the general calamities that attended the conquest, it suffered with more than equal severity: Edwin, in his expedition against the Norwegians, had compelled the inhabitants to supply his army with men and accoutrements, and during the insurrections that broke out against the Norman tyranny, this town and county were frequently the scenes of devastation. The burgesses of Derby were in the space of a few years reduced from two hundred and forty to somewhat more than one hundred, and numerous houses were laid waste.

Derbyshire under the Dukes of Mercia.

Throughout the county the freeholders were dispossessed and their places supplied by Norman soldiery. William the Conqueror gave to his followers nearly the whole of the land. In the partition of Derbyshire, Hugh de Ferrers, a distinguished officer and counsellor in the court of the Conqueror, had nearly a hundred manors in this county, and to William de Peverel, the natural son of the Conqueror, were given, together with the Peak castle, twenty manors in Derbyshire, and extensive possessions in the adjoining county of Nottingham.—Ralph Fitz Hubert is mentioned in the Doomsday Book as being in possession of nearly thirty Derbyshire manors. The other proprietors in this county were Roger de Busli, Hugh, earl of Chester, Geoffry Alselin, Ascoit Musard, Walter Deincourt, Ralph de Buron, Nigel de Stratford, Roger de Poictou, Gilbert de Gand, Robert Fitz William and others; together with the abbey of Burton and other ecclesiastic establishments. The king retained the town of Derby and about a hundred and twelve manors in his own hands.

Divided at the Conquest.

So rapid and violent a change in the proprietorship of the land was attended with calamitous consequences to the enslaved and degraded people. The manners and even the language of the English were despised by the Normans, and although William pretended to respect the body of Saxon

Inhabitants.

CHAP. 10. laws which had been compiled during the reign of Edward the Confessor, from the West Saxon, Mercian and Danish institutions, he endeavoured to abrogate such of them as had relation to the liberties of the people, and to introduce the more despotic laws of Normandy. Many of the Normans, who regarded the expedition of William in the light of a piratical adventure, hastened, by every means of rapine, to enrich themselves, and to return to their native country to enjoy their spoils. Odo, bishop of Bayeux, the maternal brother of the Conqueror, after a residence in England of fifteen years, thought himself rich enough to purchase the popedom. He caused a magnificent house to be built and prepared for his reception at Rome, but while he was collecting his plunder together and making ready to convey his accumulated treasure from the island, he was seized by the king himself, who told him that he arrested him not as bishop but as earl of Kent. Numerous charges of extortion were proved against him, and his wealth, being confiscated, enriched the royal treasury. This was not a singular instance in which the Norman barons, after plundering their English vassals, became themselves the prey of the greedy court.

Derbyshire under the Normans.

During the reigns of the Conqueror and his two sons, William Rufus and Henry, we have few historical particulars immediately connected with this county. The castle of the Peak is supposed to have been the seat of government, where William Peverel held his court, with an authority, more circumscribed, but nearly similar to that previously exercised by the earls or dukes of Mercia. There are still some vestiges of this court, which continues to be held at Lenton in Nottinghamshire; but of this and of the court derived from the manor of Lancaster, we shall take notice more at large in the proper place.

William Rufus.

In the contention that was carried on between William Rufus and his brother Robert, the latter reluctantly submitted to a treaty which not only deprived him of the crown of England but gave to his younger brother certain important towns and districts on the coast of Normandy; he was therefore easily encouraged by the king of France, in the year 1093, to infringe the treaty and seize upon some of these important places. William, upon this, levied troops and hastened to France. His natural brother, William Peverel, was entrusted by him with the command of Helme, a town and castle in the province of Eu, which he garrisoned with men drawn out of the counties of Derby and Nottingham. Robert having received aid from the king of France, took Argentau and besieged Helme, where Peverel, after a short resistance, surrendered at discretion.

Services of William de Peverel.

King Stephen.

The next historical incident that we meet with in any way connected with the inhabitants of this county, is the celebrated battle fought at North Allerton in Yorkshire, in the third year of the reign of king Stephen.—David, king of Scotland, had invaded the northern provinces of England, with a numerous army, in which many of the most warlike chieftains of his kingdom were attended by their followers, in order to espouse the claims of the empress Maud, the niece of their sovereign, to the English throne. The Scottish monarch had also a more personal interest in this invasion, and he took occasion to foment the troubles which distracted the reign of Stephen, in order, more successfully to enforce his own claims to the earldoms of Northumberland and Huntingdon. These claims he derived from

Battle of the Standard.

Battle of the Standard.

his marriage with Maud or Matilda, the daughter and heiress of the illustrious earl Waltheoff, by one of the nieces of William the Conqueror.

The time chosen by David for this invasion, was that in which Robert, earl of Gloucester, natural brother to the empress, had prevailed upon a large party of the barons, south of the Trent, to espouse the cause of his sister, and had seized upon the city of Bristol. Stephen was in the south of the kingdom, surrounded by barons whom he mistrusted, and who had actually remonstrated against the honours he bestowed upon his favourite, William de Ypres, notwithstanding his promises to discard all foreigners from his court. In this state of emergency he sent his royal letters to Thurstan, archbishop of York, empowering him to summon the northern barons of the realm to arm their followers in order to oppose the inroads of the Scots.

Those barons who obeyed the summons with alacrity on this distinguished occasion were the following. *William*, surnamed *Le Gros*, earl of Albemarle, in Normandy, but endowed with numerous manors in Yorkshire. He was young, active and bold: his troops consisted chiefly of adventurers from Picardy, trained to warfare, and esteemed both for their valour and their military skill.—*Walter de Gand*, a veteran soldier, who with his father had distinguished himself under the Conqueror, and had obtained lands in Yorkshire, Derbyshire and Lincolnshire. He was far advanced in years, and led on this occasion a body chiefly consisting of Flemings and Normans.—*Robert le Brus*, of Skelton and other manors of Yorkshire and Durham, had accompanied William the Conqueror from Normandy. He was at this period very aged, and having been a personal friend and intimate of the king of Scotland, from whom he held the manor of Anandale, he endeavoured, but in vain, to persuade David to accept of terms of accommodation, and to return to his own kingdom.—*Roger de Mowbray*, was of the Albini family: he was a minor and ward to king Stephen. On this occasion he headed his tenantry from the counties of Warwick and Leicester.—*Walter D'Espec*, one of the most illustrious of the maternal ancestors of the dukes of Rutland, was equally eminent for piety and valour. "Quickwitted, prudent in counsel, serious in peace, discreet in war, a trusty friend, a loyal subject; of stature more than ordinary large, yet comely; his hair black, his beard long, forehead high, great eyes, big face but beautiful, shrill voice, in speech elegant."* His chief manor was Hamlake in Yorkshire. This honourable and experienced warrior had, by the king's letters, been joined in commission with Thurstan the archbishop, to summon the northern barons to take arms against the invaders; and in pursuance of this commission, when the army was assembled, he, from a mound, which had been raised about the standard, addressed the warriors around him, in an eloquent and pious oration; and, as he concluded it, he turned to the earl of Albemarle, giving him his right hand, and saying, "I faithfully promise you, that I will conquer the Scots this day or lose my life by them."—*William de Perci*, ancestor of the dukes of Northumberland, was also present, at the head of his tenantry, and was accompanied by Alan, the illegitimate, but brave son of his de-

* Dugdale, from the Abbot of Rievaulx.

CHAP. 10. ceased elder brother.—*Bernard de Baliol*, from whom descended the
Battle of the Standard. claimant of the crown of Scotland, during the reign of Edward the First, inherited from his father, who accompanied the Conqueror from Normandy, a barony in Northumberland, and several manors in Durham and Yorkshire. Being a warrior highly esteemed for his years and experience, he was nominated by archbishop Thurstan, as his agent, to meet a convocation of the northern barons at *Thersk*, in order to take into consideration what resistance should be made against the Scots. In consequence of the determination of the assembly, he was sent with *Robert le Brus* to king David, who had then advanced to the banks of the Tees. The failure of this embassy has already been mentioned.—Among the other distinguished leaders in this great baronial army were *Richard de Courcy*, *William de Fossard*, *Robert D'Estoteville*, and *Gilbert de Lacy*; but the circumstance that particularly connects this glorious event with the history of Derbyshire, is the part which *Robert Ferrers*, *Ralph Alselin* and *William Peverel* took in the transaction. The two former, as we have already seen, held vast possessions in the south of this county, while the latter was lord of the Peak, and of numerous manors in Nottinghamshire. Under such leaders the men of Derbyshire composed the chief strength of the combined forces.

The confederated barons encamped at North Allerton, about the 20th of August, 1138, and there they resolved to await the approach of the enemy. Their camp was intrenched, and in the middle of it there was an elevated mound. On this mound was a pole of extraordinary height and size, bearing on its top a silver *pix*, with the consecrated host: the banners of St. Peter and of St. John de Beverley were attached to the shaft. This was the holy *standard*, which the confederate barons, with their followers, bound themselves to maintain; and hence the battle which ensued, has been known by the name of the *Battle of the Standard*.

On the eve of the battle, which took place on the 22nd of August, the archbishop harangued the congregated chieftains from the base of the *standard*. He explained to them, that the safety of their estates depended upon their own exertions, as it was impossible for the king to come to their aid. They pledged themselves, in his presence, to God and to each other, and prepared to withstand the advancing enemy.—The Scots, encouraged by their triumphant progress from the confines of their own country, attacked the intrenchments with confidence that seemed to anticipate success. The contest was long and sanguinary, and the enemy, frequently repulsed, as frequently returned to the charge. The victory was at length decided by the valour of Robert Ferrers and the Derbyshire men under his command. The Scots were completely defeated, with the loss of not less than twelve thousand men. In consequence of this successful termination of a battle, which in his precarious condition, threatened to divest him of his crown, Stephen conferred on William Le Gros, the title of earl of Yorkshire, and on Robert Ferrers, that of earl of Derby.

Lucia of Mercia. Ranulph de Bricasard, the third earl of Chester, by his marriage with Lucia, the sister of the celebrated Edwin and Morcar, the sons of Algar, duke of Mercia, seems to have strengthened his claims to the inheritance

of lands, torn from those illustrious Saxons, and conferred by the Conqueror on his uncle Hugh Lupus, by this alliance. He certainly conciliated the attachment of the remaining English tenantry connected with a family so high in their estimation. Lucia had been twice married before: first, to Ivo Tailbois, a rude and imperious Norman adventurer, by whom she had an only daughter, who died young: secondly, to Roger de Romara, earl of Lincoln, by whom she had William de Romara, who held several high military appointments under king Henry the First. On his mother's third marriage, which was with Ranulph de Bricasard, he laid claim to her possessions, but Ranulph having placed them, as the dowry of his wife, under the wardship of the crown, and engaged to pay a very heavy sum for their recovery, his suit was rejected. Enraged at this injustice, he went over to Normandy, and joined the insurrection which had broken out in that country in favour of William, the son of duke Robert. There he continued in open hostilities for two years, when king Henry, to pacify him, not only gave him those manors in Lincolnshire, which had belonged to his mother, but also bestowed upon him the hand of a wealthy royal ward, Matilda, the daughter of Richard de Redvers.—By Ranulph de Bricasard, earl of Chester, the sister of Edwin and Morcar, had two sons, from the eldest of whom (Ranulph de Gernons) may be traced branches of the lineage of the dukes of Devonshire and Rutland. She survived her husband, and in the 5th of Stephen she paid to the king three hundred and seventy marks for the livery of her dowry out of the lands of duke Algar, her father; and soon after she paid a fine of five hundred marks, that she might not be compelled to bestow her hand and her possessions upon a fourth husband.* She was buried at Spalding, a monastic cell attached to the abbey of Croyland, and richly endowed by her illustrious Saxon ancestry.

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Lucia of Mercia.

Ranulph de Gernon was a person of extraordinary valour, but of a turbulent disposition. During the contention between Stephen and the empress Maud, he took part with the latter; but he was feared and respected by both parties. He married the daughter of Robert, earl of Gloucester, the uterine brother of the empress. Under pretence of keeping Christmas in the castle of Lincoln with his half-brother, William de Romara, earl of Lincoln, he repaired thither, in the year 1141, with his wife and a large retinue of armed followers. He then declared openly in favour of the empress, which induced Stephen, who was at the head of a considerable army, to lay siege to the city. The king's forces consisted chiefly of foreigners, but there were also in his camp, as much in the character of auxiliaries as subjects, some English barons, among whom was William Peverel, with a large band of his retainers from the Peak of Derbyshire. Ranulph de Gernon, alarmed at the sudden investment of the place, and fearing that it would not long withstand the assailants, favoured as they were by many inhabitants of the city, privately left the castle, unattended, and hastened to his wife's father, who was recruiting his troops in Gloucestershire and had been joined by the Welsh. The earl of Gloucester, interested in the

Siege of Lincoln.

* She must have been considerably advanced in years at the period of her third widowhood, as she was married to Ivo Tailbois in 1072, and Ranulph, her third husband, died in 1129.

CHAP. 10. Siege of Lincoln.

fate of his daughter, who was besieged in Lincoln castle, as well as anxious to preserve so important a station, drew his troops from their winter quarters, and marched to Lincoln, with such rapidity that he nearly surprised the king, who thought that the waters of the Trent, which, during that season of the year, were much swollen, would have impeded the march of the two earls. Ranulph de Gernon had the chief command of the army, which he divided into four parts. The earl of Gloucester led the reserve, who, as he resigned the honour of leading the van to his son-in-law, addressed the soldiers, telling them that the earl of Chester, being a person noble of birth, and excelling in valour, was worthy of the honour of striking the first stroke on that occasion: that for himself, the madness and perjury of Stephen, who had sworn fealty to the empress in the time of king Henry, was the motive that incited him to arms. He then pointed to the increasing inundations by which they were surrounded, and showed the impossibility of retreat. "We must conquer or perish;" he added, "for those who have no refuge must have recourse to their valour. But," continued he, "against what manner of men is it that you are to fight? Why, there is the earl of Mellent, a most deceitful person, who has iniquity in his heart, fraud in his lips, and sloth in his actions. Next there is the earl of Albemarle, a drunkard, but no soldier: and then there is Simon, earl of Northampton, a man of words only, who never makes performance of his promise." And thus he went on, characterising in a contemptuous strain, the barons who adhered to the cause of Stephen. The earl of Chester also addressed the troops, but scarcely were these orations concluded, when the battle began. For some time the conflict continued on both sides with equal valour, until the king's cavalry, which were hireling adventurers from Flanders and Brittany, gave ground, and in retreating towards the walls of the city, discouraged the infantry and threw them into confusion. The earl of Albemarle, then styled earl of York, is said by the old historian, Simon of Durham, to have been the first who with his adherents set the example of flight. The discomfiture of the king's troops soon became general. Stephen, with a few who remained faithful to him, among whom were William Peverel and his brave adherents from the Peak, remained on the field of battle, fighting on foot, though assaulted by multitudes, which he repelled with incredible valour. He even attempted to rally his flying troops, but he soon perceived that this was impossible; for some of his principal leaders openly led over their men to join the adverse army. The chief of these deserters was Waleran, earl of Mellent, whose half-brother William, earl of Warren, had previously fled. King Stephen continued to fight with invincible courage, with William Peverel at his side. His battle-axe was broken by the force and frequency of the blows he dealt around him. He then drew his sword and for a considerable time continued to defend himself, until his sword flying into fragments, and he being at the same instant struck down with a stone, William de Keynes, one of the soldiers of the earl of Gloucester, rushed in upon him, and seizing hold of his helmet, set the point of his sword against his throat, and threatened him with instant death if he did not yield himself prisoner. Stephen, even at this extremity, refused to surrender to any but the earl of Gloucester, who instantly stept forward and received the brave but unhappy mon-

arch as his captive. William Peverel was taken prisoner with the king, as was also Bernard de Baliol, Roger de Mowbray, Richard de Courcy, William Foissard, and several other barons. CHAP. 10.

When William Peverel was taken prisoner, his castle at Nottingham and his other possessions were seized upon and destroyed by a division of the earl of Gloucester's army, which had been entrusted to the direction of Ralph Pagnel, of Dudley in Staffordshire. All the inhabitants of Nottingham, capable of bearing arms, having accompanied William Peverel to the siege of Lincoln, the town was totally defenceless: it was, consequently, plundered and afterwards set on fire.—In the year following, the king having regained his liberty, and his affairs wearing a more favourable aspect, William Peverel, at the head of a party of his adherents, surprised the castle of Nottingham, by a nocturnal stratagem, and slaughtered all those who held it in the name of Pagnel. William de Peverel.

In the first year of the reign of Henry II. the son and successor of William Peverel, whose name also was William, was accused of having, two years before, poisoned Ranulph, earl of Chester. The charge was that he had conspired with others to effect this crime, but the cause that instigated him to this diabolical act does not appear. Fearful that king Henry would avenge with severity the death of an eminent baron, attached to the interests of himself and his mother, Peverel fled to the monastery of Lenton, where he caused himself to be shorn as a monk; but being apprized that Henry was returning that way from York, he quitted the monkish habit and escaped out of the kingdom. Many of the estates of the Peverels were retained for a long period in the hands of the king, who at length bestowed the chief of them on his son John, then earl of Morton, and afterwards king of England. Some of them came by marriage to the family of Ferrers.

We meet with no political occurrence in history connected with this county until we come to the nineteenth year of the reign of Henry II.; a sovereign who has been extolled for his extraordinary talents, although the extensive territories over which he ruled were the continual scenes of insurrection and disorder. He was unhappy in his family, and at the period of which we are speaking, his sons had excited the provinces of Guienne and Bretagne, held by him in France, to rebel against him. His eldest son, Henry, had been crowned in the life-time of his father, and had espoused a daughter of the king of France. This young man was of a haughty disposition, and having for some years borne the titular honour of a king, he became eager to possess the regal authority. In his designs he was encouraged by his father-in-law, who instigated him to demand of his father the dukedom of Normandy; while covertly a plot was in agitation to deprive the king of his crown. Into this conspiracy, the young princes found little difficulty in persuading several of the English barons to enter. These were the earl of Leicester, Robert, earl of Ferrers, Hugh, earl of Norfolk, Hugh, earl of Chester, and many others. When the purpose of the conspirators was considered ripe for execution, young Henry, then resident at Paris, assumed and exercised the rights of sovereignty, receiving homage of the vassals, making grants out of the crown lands, and assigning pensions out of the public revenue. The king of France levied Barons take part with young King Henry.

CHAP. 10. troops and attacked Normandy, while the king of Scotland, as had been concerted, made an irruption into the northern counties of England. The earl of Leicester, appointed by young Henry and the king of France to invade England with a band of Flemings and Normans, landed in Suffolk, and being joined by the earl of Norfolk, he plundered and burnt Norwich, which was without a garrison, and seized upon Hageneth castle. The earl of Ferrers, no sooner heard of the landing of Leicester on the eastern coast, than, in conjunction with the earl of Chester and other barons, who complained that the king had wronged them by seizing and destroying their castles, appeared in arms. He garrisoned his castles of Tutbury and Duffield, which, in despite of the king's ordinances, he had greatly enlarged and strengthened, and, levying forces from among his vassals in Derbyshire, he marched against Nottingham, which was then held for the king by Reginald de Lacie. That town he entered with little difficulty, and having burnt it, he proceeded to unite his forces with those of the earl of Leicester, who was preparing to advance into the heart of the kingdom. King Henry, in the meantime, having quelled the different insurrections that had been incited in his French provinces, and having expelled his enemies from Normandy and Brittany, hastened to return to England. Before his arrival, the earl of Leicester had been defeated and taken prisoner at St. Edmondsbury, by the troops under Bohun, constable of England, and Richard de Lacie, the high justiciary and regent. The castle of Tutbury was besieged by a strong body of loyalists, aided by a band of Welsh auxiliaries under the command of Rees, a Welsh prince, who was greatly attached to the English monarch. The earl of Ferrers, under these circumstances, repaired to Northampton, where Henry then held his court, and there having submitted to royal authority, he was pardoned, upon condition of surrendering his castles, and giving security for his future fidelity. The castles were ordered to be demolished, and there now remain but few vestiges of that at Duffield on the elevated site from which it commanded a large district in the vale of the Derwent, for some miles north of the town of Derby.

Revolt of young King Henry.

Earl Ferrers. At the beginning of the reign of Richard I. the earl of Ferrers, for some reasons that do not appear in history, was for a time dispossessed of his Derbyshire estates. These, together with the castles of the Peak and Bolsover, were given to the king's brother John, earl of Morton or Mortagne, and subsequently king of England. The earl of Ferrers, nevertheless, attended his valiant sovereign to the Holy Land; and we may justly conclude, that he led with him a band of brave followers from this county. He perished at the siege of Acre, which happened in the year 1191.

During the troublesome reign of John, the barons who constantly adhered to him increased their power and possessions by charters and grants. William de Ferrers demanded a special charter, nominating him earl of Derby, which perhaps was the more necessary as his father had been so extraordinarily deprived of that dignity. He also obtained a grant of the third penny upon all pleas pleaded before the sheriff of Derbyshire. His other grants will be more particularly stated in the family history of the Ferrers. Whatever were his services, we may well doubt whether his

loyalty was not greater than his patriotism, since we find his name as one of the witnesses to that charter in which king John surrendered the realm of England to the pope. Earl Ferrers.

The family de Briwere.

It will be manifest to our readers, that much of this portion of the history of the county must be so closely connected with the histories of the great families who have held possessions within its boundaries, as to be frequently a repetition of that which more properly belongs to another portion of this work. This will sometimes be unavoidable; but we shall endeavour to confine ourselves to the narration of incidents that do not involve such duplication of detail.—In the reign of king John, we find the family of Briwere rising into extraordinary power and obtaining large possessions in Derbyshire. To William de Briwere, were granted the manor of Chesterfield and the whole wapentake of Scarsdale. He was also constituted governor of Bolsover castle.

Barons confederated against King John.

Among the confederated barons who after John's abject surrender of his crown and sceptre to Pandulph the pope's legate, formed a league against a sovereign who had so shamefully abandoned the honour of the realm, we find none who were connected with Derbyshire, with the exception of Robert and Ralph de Gresley:* this family held the manor of Manchester in Lancashire, and Halton castle in Cheshire, and was in possession of Gresley castle, with the manors of Heathcote, Swardingcote and Church Gresley, in this county.

The barons had, early in the reign of this perverse and abandoned monarch, displayed their dissatisfaction at his conduct. His voluptuous libidinism knew no bounds, and he made enemies of many of the powerful nobility, whose attachment was required to strengthen his title to the crown, by his debauchery of their wives and daughters. The people were oppressed by taxes levied unjustly; and even the clergy withdrew from him their support. As Philip, king of France, a prince of politic mind and ambitious spirit, aimed at the possession of the French provinces, over which John retained an irresolute and irritating sway, and was continually inciting commotions in those districts, the king of England was particularly dependent upon the aid of his barons. In the year 1201, the province of Poictou revolted, and John, roused from his licentious indolence by the apprehension of losing so fair a district of his continental dominions, summoned the barons to meet him on the approaching Whitsuntide, at Portsmouth, with horses and arms. Instead of obeying this summons, the barons assembled at Leicester, and after a conference among themselves, they came to a determination that they would not accompany the king in this expedition, unless he first solemnly promised to govern strictly by the laws of the realm. John, who was as intemperately violent as he was unstable of purpose, provoked by this declaration, instantly employed the troops which he had already raised from the immediate vassals of the crown, in seizing the castles of the refractory barons. William de Albini, one of the most illustrious ancestors of the dukes of Rutland, then held the castle of Belvoir, and was the first against whom the displeasure of the sovereign

William de Albini.

* The connexion of this extensive family with Derbyshire seems to have been only by a collateral branch. The lineage of the barons Robert and Ralph has been long extinct.

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was directed. His castle was attacked, and after a short defence, was surrendered. The barons had not imagined that the king would defer his expedition on account of their disobedience to his commands, but rather expected that the troubled state of Poictou would induce him to comply with a representation which was as just, as his necessities appeared to be urgent. They were consequently unable to resist his attack upon their castles. They submitted, and obtained their pardon and the restoration of their fortresses, upon their furnishing the aid required, and placing into the king's power, as hostages for their fidelity, one of the children or near kinsmen of each.

The English forces, when landed in France, served their unworthy prince with faithfulness and intrepidity. At a battle near Mirabel, the unfortunate nephew of king John, prince Arthur, the just claimant of the English crown, who had recently espoused the eldest daughter of the French king, was taken prisoner, together with John's most inveterate enemy, Hugh, earl of Marche. The young prince was shortly after put to death at Rouen, and the king, thus delivered from his rival kinsman, for whose sake alone he was weak enough to imagine that Philip of France had been employing his intrigues, his money and his forces, resigned himself wholly to his natural indolence and the careless pursuit of dissolute pleasures. His barons, irritated at the pusillanimity of his conduct, pointed out to him that their own honour and that of his crown were sacrificed in his thus permitting the king of France to become master of the extensive provinces in that country, which had been held by his ancestors. He heard their remonstrances and dismissed them with angry petulance. In a short time he lost Normandy, with all his other French possessions, and then returned to England to endure the indignities that were about to be heaped upon him by the pope's legate.

After his abject submission to the court of Rome, he relied so confidently on the sentence of excommunication, which the pope had promised to pronounce against all who should dare to oppose him, that he began to entertain a design for recovering his French territories. He accordingly prepared for an expedition upon an extensive scale, and, having appointed the bishop of Winchester and Fitz-Piers to act in his absence as regents of the kingdom, he again summoned the barons of the realm to meet him with all their adherents, in arms, at Portsmouth. The barons again remonstrated; upon which the king hastily marched to the central provinces of the kingdom with such troops as were under the immediate command of the crown, and threatened again to seize their castles and punish them for their disobedience.

The barons remonstrated, and they did this with the more firmness, as a secret communication of their general discontent had taken place among them, through the instrumentality of Cardinal Langton, archbishop of Canterbury, a prelate of strong and independent mind, who saw with indignation the absolute subjection of the English church to the see of Rome. Langton had privately intimated to such of the barons, bishops and abbots as appeared to him worthy of his confidence, the existence of a charter, granted by Henry I. at the commencement of his reign, which recapitu-

lated and confirmed most of the institutes in favour of the liberties of the land, which had existed among the Saxons, and had been collected together by the command of Edward the Confessor. During something more than a hundred years, at a period of ignorance and turbulence, when the dominion of force and superstitious fraud over the human mind was at its height, the barons had lost all but a very confused tradition of the important nature of such a charter, and they listened to the reading of the copy which Langton had taken from the archives of a monastery, with pleasure and astonishment. They instantly bound themselves by oath to adhere together for the re-establishment of those laws, which they now regarded as the only bond of their allegiance to the crown. For a time, this league of the barons remained undivulged, but the pope's legate having become acquainted with it, and having communicated it to the king, with the view of urging him by his fears to crouch more abjectly under the protection of Rome, the barons, by the advice of the archbishop, resolved to make a public demand of their liberties. CHAP. 10. Confederate Barons.

At the latter end of the year 1214, John returned from an expedition in France, which he had rendered doubly disgraceful, because, although he was well attended by the baronial forces, who were on all occasions alive to the honour of their country, and had the emperor of Germany and the earl of Flanders for his allies, yet his openly expressed suspicions of his nobility and his own indolence prevented him from seizing the advantages a combination of favourable circumstances placed within his reach. In spite of the remonstrances of that portion of the nobility whom he had no reason to mistrust, he permitted Philip, without those preventive movements that had been previously laid down as the plan of the campaign, to march into Flanders and there obtain the important victory of Bovines. Even then, the barons urged him, in vain, to seize the opportunity which the absence of the French king offered him of recovering the hereditary possessions of his forefathers. He was jealous of both their advice and their valour; and listening to the dictates of the pope's legate, who was unwilling that the new tributary of Rome should become too powerful, he patched up a hasty truce with Philip and returned to England. There his capricious and exorbitant taxes rendered him hateful as a tyrant, while his indolence and debauchery made him contemptible as a man.

The barons having revisited their estates, and instructed their retainers to hold themselves in readiness for the performance of the military duties attached to their condition under the feudal laws, met at St. Edmundsbury, in the presence of the cardinal, archbishop Langton. They renewed their oath; and resolved, that immediately after the approaching Christmas they would, with men, arms and horses, go to the king and demand of him, a charter for the establishment and security of their liberties, founded upon that which the archbishop had disclosed and explained to them, but somewhat still more liberal as related to the rights of those who claimed to be accounted free. This new charter seems to have been elaborately drawn up, and embraces the just rights and immunities of Englishmen, not in a legislative so much as in a direct legal sense. There is in the seventeenth and eighteenth articles, mention made of the summoning of peers, prelates, and of those who hold of the crown in chief, to a general council for

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the assessing of scutages and other business to be named in the summons, but there is no outline in it of such a parliament as we at present possess. Its object was chiefly to provide against arbitrary demands and practices, some of which had by the continued abuse of justice obtained the warrant and authority of custom. It insists upon the personal security of men in every condition, protecting even the villane or serf from such amercements as might deprive him of the means of gaining his livelihood. This is the *Magna Charta,* or the Great Charter of the Realm.

The barons assembled at the appointed time, and having apprized the king of their intention, and sent many of their armed retainers before them, he was struck with terror at their resolute procedure, and consented to meet them at the hall of the New Temple, which then occupied the ground on which the Middle Temple in London now stands. Having heard their demands, he promised, in general terms, his acquiescence, but required time for deliberation, and assured them he would meet them again at the ensuing Easter. This period of delay he employed in summoning the immediate vassals of the crown to attend him, and in hiring foreign soldiers in Brabant. He called also upon the pope to protect him against his disobedient subjects by a solemn interdict and excommunication, and in order to have a pretence for compelling those subjects to aid in place of arming against him, he assumed the cross, and declared his purpose of leading an army against the infidels in the Holy Land.

Robert Fitzwalter was the leader of the barons. His patriotism was excited by a serious family injury which this debauched monarch had inflicted upon him. He was the father of a beautiful daughter, whom John had endeavoured to debauch, and of whose person he had used the most desperate means to obtain possession. Failing in his purpose, his licentious desires were converted into hatred, and, it is said, he caused her privately to be poisoned. The irritated parent swore implacable revenge. The principal residence of Fitzwalter was Baynard castle in London, and he had also a castle at Erith in Kent, a few miles from the metropolis. There many of the barons retired to await the decision of the king; but as that post was scarcely maintainable against the troops which John was drawing around him, they retired to Stamford in Lincolnshire, and there commanded the attendance of their armed retainers.

The king retired to Oxford, where he received a memorial from the barons, which terminated with the declaration, that unless he granted the liberties they demanded, they were prepared to seize upon the castles and possessions of the crown. Irritated at this threat, the unhappy king, in a paroxysm of rage, declared that he would not be made the slave of his subjects, and sent them a peremptory refusal. The barons, under the command of their leader, Robert Fitzwalter, on whom the archbishop had bestowed the imposing title of "Marshal of the Army of God and of his Holy Church," immediately marched to Northampton. From Northampton, after possessing themselves of the castle, they marched to Bedford, which was delivered up to them by William de Beauchamp. In two days they reached London, where they instantly laid siege to the tower, in which John had taken refuge. Their cause being thus successful in its com-

mencement, many of those barons who had hitherto remained neutral, declared in their favour and brought them assistance; even some of the king's friends began to urge the justice of their claims. The king, thus situate, entered into a negociation with the besiegers, and it was agreed that he should meet them in an open plain between Staines and Windsor, called Runnymede, where in ancient times public councils relative to the internal affairs of the nation had occasionally been held; from which circumstance the appellation of Runnymede, or Meadow of Council, is supposed to be derived. On the 15th of June, 1215, the parties met. The king was accompanied by Pandulph, the pope's legate, seven bishops and fifteen barons, who remained attached to him, the principal of whom was William Marshall, earl of Pembroke. The party of the insurgent barons was numerous and splendid: they were attended by multitudes of armed retainers. The cardinal, archbishop Langton, acted as mediator. The consultation was short. John, with an appearance of frankness and sincerity which he well knew how to assume, signed the Great Charter and the Charter of Forests, without offering any objection to the articles which circumscribed the excess and prevented abuse of his presumed prerogatives.

Confederate Barons.

Magna Charta signed.

But John, although he had yielded submissively to the court of Rome, and felt little reluctance at being the agent of an extortionate foreign power over his subjects, was not easy under those restraints upon his habitual tyranny, which his subjects had laid upon him. He grew melancholy, and pondered upon the most violent methods of recovering his absolute power over his barons. As he was without money he could not draw together a sufficient number of those hireling troops with which Europe then abounded; but he came to a determination to promise to such leaders of Flemish and other brigands as would join his standard, the estates of the barons who had opposed his pretended prerogatives. Numerous men of high birth, whose maintenance depended upon their swords, and who headed bands composed of fugitives and desperadoes, were easily induced to aid him in his design. Deeds were actually executed in writing and signed by John, in which estates, still in possession of the barons, were granted to adventurers of this description. Troops raised in this manner were ordered to be landed at Dover by the ensuing Michaelmas, and the wardens of the king's castles were commanded to receive them and furnish them with arms and provisions. The sanction of the pope to these proceedings was easily obtained, and to assist the views of his vassal, he published an ordinance commanding the barons to lay down their arms on pain of his indignation. The cardinal, archbishop Langton, encouraged them to treat these threats of the papal see with the contempt they merited, and delivered up to them the town and castle of Rochester, where they found a large quantity of arms.

John repents having signed the Charter.

John, who had retired into the Isle of Wight, hastened at the appointed time to Dover, where numbers of greedy and ambitious adventurers arrived in rapid succession. With these he undertook the siege of Rochester. That town and castle was defended by William de Albini, one of the illustrious ancestors of the Rutland family, with a chosen body of the baronial troops. The siege was carried on with great vigour, and the country in every direction was laid waste by parties of foreign soldiers, who were

Siege of Rochester.

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Siege of Rochester.

The Dauphin of France invited by the Barons.

After the siege of Rochester, the king divided his foreign troops into two portions, with one of which he marched to Northampton, Derby and Nottingham, while the other he placed under the command of his natural brother, William, earl of Salisbury. Dreadful was the condition of the country at that period: two armies of foreign marauders ravaged without mercy the lands and mansions of the barons, who in vain attempted to meet these swarms of free-booters in open warfare. The papal edict of excommunication added, in those superstitious days, to the general misery. Under these circumstances the leading barons resorted to London, which they fortified; and having appointed a council, they came to the desperate resolution of sending an embassy to the king of France, with the offer of the crown of England to his son, prince Lewis. Philip received the embassy with much pleasure, and in the following May, the Dauphin, prince Lewis, arrived at the isle of Thanet with a fleet of nearly seven hundred ships, full of troops, which landed at Sandwich. Rochester was speedily retaken by the baronial forces assisted by the French. Upon this the French prince marched to London, where the citizens swore fealty to him, and he took upon himself the government of the realm, having appointed the cardinal archbishop to be his chancellor. Among the French nobility who attended upon the Dauphin in this expedition were several who became connected with the baronial families; and we may particularly mention William de Beaumont, whose lineal representative still holds estates in Derbyshire.

The party and power of the Dauphin increased: he became master of all the southern and many of the northern counties: the baronial troops under Fitzwalter compelled the king to retreat, and laid siege to Windsor and Dover: the king of Scotland, in consequence of the summons of Lewis, did homage to him for the lands he held of the crown of England, and the northern barons, with aid from Scotland, reduced the city of York. The French adventurers in the army of John refused to fight against the son of their own monarch and deserted the standard of the unhappy king, who fled from place to place, suspicious even of his warmest and most faithful adherents. At the small town of Lynn, in Norfolk, he deposited his crown, sceptre, and other jewellery, which from that circumstance received the name of Lynn Regis; but on the approach of the baronial forces he re-

treated into Lincolnshire. In attempting to cross the wash, the tide rushing up the streams laid the country under water, and it was not without extreme difficulty that he escaped to the abbey of Swineshead; from thence he was conveyed to Newark, where he died of a severe fever with which he was seized; but not without the suspicion of having been poisoned by the priests with whom he had taken refuge. CHAP. 10.

Henry III.

On the death of king John, the barons who had adhered to his cause held a meeting, at which some of the adverse party attended, who had become suspicious of the designs of the Dauphin and were willing to hope that the counsels of the new reign would be favourable to their liberties. To this assembly, the earl of Pembroke presented the young king, a boy, who was only in the tenth year of his age. The character of the noble earl had insured him the respect of the confederates, for while he condemned their connexion with a foreign prince, he admitted the justice of those claims which they sought to establish, and for which they had obtained the sanction of a Charter which his patriotism and integrity told him ought to be held inviolable. This he avowed in his address to the meeting, as he lifted up the royal child in his arms, and called upon them for their voices in favour of Henry the Third. The unanimous shout of "We will have Henry for our king," was the echo to this appeal. At this assembly the county of Derby may be said to have possessed considerable influence, for we find among the leading members, William de Ferrers, earl of Derby, Philip de Albini and William de Briwere. These eminent barons also assisted at the coronation of young Henry, which took place within a few days; and strenuously supported the appointment of William Marshal, earl of Pembroke, to be the guardian of the king and the protector of the kingdom.

When this appointment was known to the confederate barons, the interest of Lewis rapidly declined. He was obliged to raise the siege of Dover, and although he became master of the castles of Hertford and Berkhamstead with considerable loss, those of Marlborough, Farnham, Winchester and several others, together with the Cinque ports, declared for Henry. Under these circumstances he reluctantly consented to a truce, which gave the Protector time to arrange the affairs of the crown, to correspond with the discontented barons, and to prepare for the military operations of the spring of 1217, on which would probably depend the fate of the throne. On the conclusion of the truce, the earl of Pembroke, desirous of striking some effective blow, resolved to besiege the castle of Mount Sorrel in Leicestershire, which was then held by Henry de Braibraque, with ten French knights and a strong garrison. As the object was important even as a trial of strength and influence between the conflicting parties, the regent placed a select body of troops under the command of Ranulph, earl of Chester, who was joined by William, earl of Albemarle, William de Ferrers, earl of Derby, William de Cantelupe, lord of Ilkeston, and other barons with their armed tenants and retainers. The siege was commenced with great spirit, but the Dauphin, being aware of the consequences that would inevitably follow the surrender of a place on which the eyes of the neutral barons were then fixed, sent to its relief

Siege of Mount Sorrel.

CHAP. 10. Henry III.

the count de Perche, with twenty thousand men. The count marched from London on the 1st of May, and on his approach, the earl of Chester with the other barons, finding themselves too weak to venture upon a pitched battle, withdrew to the regent, who had posted himself at Nottingham.

Siege of Lincoln.

Elated with this success the French troops marched to Lincoln, ravaging the country on each side of their route. The castle of Lincoln held out for Henry, but the city, under the command of Gilbert de Gant, whom the Dauphin had created earl of Lincoln, was in the power of the confederated barons. The regent perceived that the fate of the kingdom depended upon his promptitude. The castle of Lincoln was reduced to the lowest extremity, and he, being now at the head of a considerable force, advanced, by hasty marches, upon the enemy, who expected to take the castle before the regent could call together the barons and their retainers. Astonished at the sudden approach of the royal army, the count de Perche called a council of war, in which it was resolved to defend the city within the walls, contrary to the opinion of many who were for hazarding a general engagement. The regent invested the town, and immediately opened a communication with the brave garrison in the castle, where during the night a chosen body of troops under the command of Faulk de Breant entered, in order to be ready to attack the enemy in the city as soon as the main army should commence the assault upon the walls. Ranulph, earl of Chester, who was short of stature, also entered the castle, the garrison of which had expected his coming, and in some communications with their besiegers had promised to surrender if they were not relieved by the gallant earl within a certain period. The earl, with his accustomed eagerness, could not refrain from announcing his arrival, by the sound of a trumpet and a challenge addressed to the French general, from the turrets of the castle. The count de Perche instantly presented himself in front of the battlements on horseback; and, observing the diminutive stature of the challenger, he shouted out, "What, have we tarried from seizing our prey, in order to be frighted from it, by such a pigmy as that?" The earl disdainfully replied—"I vow to God, and to our lady, whose church stands before me, that before to-morrow evening, I will seem to thee to be stronger, and greater and taller than yonder steeple." With these words he descended from the turrets into the castle.

Before day-break, the next morning, the royal army stormed the great gates of the city, of which they soon became masters, while Foulk de Breant, with his followers, made a sally upon the French troops in the city. The count de Perche, though aware of this double attack, was unable to resist the impetuosity of his assailants. The cavalry, in which his army abounded, were of no service, and his troops, which were attacked before and behind in the narrow streets, were quickly slain or put to confusion. The count de Perche was slain in the cathedral by Ranulph, earl of Chester, who instantly proclaimed king Henry; and the young king, who was then at a farm house, belonging to a monastery westward of the city, was carried in triumph in the arms of the principal royal leaders, and, being placed on the high altar, a white wand was put into his hand instead of a sceptre,

and homage was done him by the barons present, amid the shouts of the victorious soldiery. The slaughter, in the meantime was dreadful, and as the city of Lincoln had sided with the confederated barons from the first assertion of their rights, it was abandoned to plunder, and the booty was so great, that the sacking of the city has been called "Lincoln Fair." The riches of the cathedral must have been immense, for the precentor, Geoffrey de Drapinges alone was despoiled of eleven thousand marks. All the leading barons of the confederacy were either slain or taken prisoners in this battle; and shortly afterwards a treaty was made with the Dauphin, in consequence of which he withdrew from the kingdom. CHAP. 10. Siege of Lincoln.

No sooner was the nation delivered from the French troops, who had become a terror even to those who had called them in to aid their cause, than new sources of internal troubles arose. To the royalist barons had been granted many estates, seized and confiscated as the property of the insurgent confederates. The regent, who perceived both the policy and justice of making restoration to those whose only crime had been their resistance of tyranny, called together a large body of troops and speedily silenced the complainants. Robert de Gangi, the friend and companion of Ranulph, earl of Chester, held the castle of Newark in Nottinghamshire against the regent during a siege of eight days. The earl of Pembroke was anxious that the two important Charters obtained from king John by the insurgent barons should be strictly observed, and for that purpose a meeting of the nobility, clergy and of others who held lands as freemen, took place at London about the Michaelmas of 1218, and confirmed the Great Charter and the Charter of Forests.

Death of the Earl of Pembroke.

But before these wise measures could be carried into effect, the illustrious earl, whose united firmness and liberality had at once delivered the kingdom from foreign invaders and confirmed the freedom of the nation, died, and was succeeded as regent by Peter de Roches, bishop of Winchester; Hubert de Burg being, at the same time, made chief justiciary of England. These two powerful men were jealous of each other, and the latter contrived to gain a complete sway in the counsels of the king, and to rouse the indignation of the barons by his total disregard of the Charters which had been sworn to both by the young king and his father. By the advice of the justiciary, Henry had no sooner been declared of age, than he annulled the Charters by a proclamation, in which he insisted that he was not bound by any acts or promises done or made in his name during his minority.

Confederacy of the Barons.

A dispute relative to a manor in Cornwall, in which Richard, duke of Cornwall and brother of the king, appealed to the provisions of Magna Charta, roused the barons again to form a confederacy in defence of their rights; relying particularly on the countenance of the young prince Richard. One of the most forward on this occasion was Ferrers, earl of Derby, and with him were conjoined one of the sons of the great earl marshall Pembroke, together with the earls of Gloucester, Chester, Warren, Warwick and Hereford. These confederates met at Stamford, and resolved to enforce the observance of the Charters, but Hubert de Burg, the justiciary, who was aware of the danger in which his counsels had involved himself and his

CHAP. 10. sovereign, determined to bring about a reconciliation between the king and his brother, and thus detach the young prince from the confederacy. Prince Richard was offered the lands of the earl of Boulogne, then deceased, and had the dower of the queen-mother settled upon him. Contented with these emoluments the duke of Cornwall thought no more of the restoration of the Charters, and the confederacy was dissolved.

Confederacy dissolved.

Disgrace of Hugh de Burg.

In a few years afterwards, the justiciary, Hugh de Burg, fell under the displeasure of the king, who had adopted the counsels of his rival the bishop of Winchester. The earl of Derby was one of those to whom the custody of the disgraced justiciary was committed. The desire of absolute power was, however, the motive of all the measures of the king and his ministers, and a determination was taken by the court to deprive the English barons of all places of trust and to supply their places with foreigners. To strangers from Gascony and Poictiers were committed the most considerable posts and governments. This irritated the barons, who refused to attend at a parliament, which the king, then greatly in want of supplies, had summoned to assemble at Oxford. Troops of foreigners continued to arrive from the king's dominions in France, and many of their leaders received grants of lands and were constituted peers of England, in order to form a powerful court party, until, at length, the English barons met in a body, and sent a deputation to the king, declaring that if he did not discard the bishop of Winchester, and restore the Charter of their liberties, they would disclaim their allegiance to him, and place on the throne a prince who would better observe the laws of the realm. Secure in the attachment of the foreign troops by whom he was surrounded, and on whom he was daily conferring new favours, he seized many of the baronial castles, and compelled others of the nobility to give up their children as hostages of their fidelity. Some voluntarily submitted, and Richard, earl of Pembroke, whose sister had been married to the earl of Derby, finding himself deserted by the confederates, fled to Wales, and there found protection in the court of prince Llewellyn. We shall not pursue the narration of the contest which the earl of Pembroke, almost alone, continued with the king and his ministers, in which that obstinate prince incurred the increasing contempt and hatred of his subjects. Constrained at length, by his pecuniary necessities, in the year 1237, he promised the observance of the Charters, and called the English barons around him, who in consequence of his pretended concessions, immediately voted him the aids he demanded, to be levied upon the corn, sheep and cattle of the realm. The parliament which made this grant, consisted of archbishops, bishops, abbots, priors, earls, barons, knights and freeholders; but we meet with no mention of representatives of any class of persons nor of the people at large; but there is the trace of such representation in this statute of aid, for it was determined that four knights should be chosen for each county who should state what the inhabitants of such county might be able to pay.

Another Confederacy.

Simon de Montfort.

Twenty years of weak, though tyrannical government ensued, in which the bishop of Winchester died, and Simon de Montfort, a foreigner by extraction, who had espoused Eleanor, countess dowager of Pembroke and sister to the king, after acquiring wealth and power through the patronage

of the crown, became a champion for the liberties of the realm. The barons, in 1258, resolved to yield no longer to the protestations and professions of a sovereign, who had so repeatedly deceived them, and therefore on being summoned to attend one of the parliaments of that period, which was to assemble at Oxford, they came in military array, attended by their tenants in arms. It was then agreed that twelve commissioners should be appointed on the part of the king and the same number on the part of the barons, who should draw up articles binding between the sovereign and his subjects. Simon de Montfort, who had succeeded his father as earl of Leicester, was made president of this extraordinary commission. The articles were strongly drawn up. They provided that the king should confirm the Great Charter: that the office of chief justiciary should be given to a person of talent and integrity, and that the other ministers, including the chancellor, treasurer and justices, should be appointed by the twenty-four commissioners: that the custody of the king's castles should also be entrusted to the superintendence of the twenty-four: and that the parliament should meet three times every year, namely, on the eighth day before Michaelmas, the morrow of Candlemas, and the first day of June, being three weeks before the festival of St. John. These articles or provisions of Oxford deserve particular notice, for, in them, the Commons are expressly mentioned by name. The passage runs thus—"It must be remembered that the Commons elect twelve prudent men, who shall come to the parliament, and other times as matter shall be, when the king or his council shall require them to treat of the wants of the king and of the kingdom. And the Commons shall regard as established that which these twelve shall do; and this will be done to spare the cost of the Commons."* This clause was not intended by the barons to be favourable to the people, for it is manifest that the first twelve representatives of the Commons were chosen by the barons themselves out of their own body. Among the names of these we find Thomas Gresley, who was of the elder branch of that family, since known in Derbyshire: during the next year he was appointed, probably by the twenty-four commissioners, warden of the forests south of the Trent, but he died during the subsequent civil war. His son married Avisa, granddaughter of Hubert de Burg, who has been mentioned as the grand justiciary of the realm.

The Barons confederate under Montfort.

Articles of Oxford.

By the provisions of Oxford, the realm, though nominally a monarchy, had become an aristocracy, and the government was almost wholly in the hands of the twenty-four commissioners, at the head of whom was the earl of Leicester. London had declared itself in favour of the barons, and the cinque-ports, in obedience to the commissioners, fitted out a fleet, to prevent the king from receiving aid from abroad. Still the king's party was strong and there were rising jealousies among the barons: it was also perceptible that however inclined a wealthy corporate body like the capital might be to take part with the aristocracy, the people at large were, for the

* The original is in old French, and stands thus in the Annals of Burton.—"*Si fet a remembrer ke le Commun eslise* xii *prodes homes ke vendrunt as Parlemenz, et autre fez quant mester serra quant le Roi u sun Consell les mandera pur treter de bescingnes le Rei e del Reaume. E ke le Commun tendra pur estable cer ke ces* xii *frunt. E ceo serra fet pur esparnier le cust del Commun.*"

CHAP. 10. The Commission of Barons.

most part, attached to the government of the sovereign. We may, indeed, be permitted to remark, that an aristocratic republic is always more hateful to the lower and laborious classes, than an absolute despotism. The forces of the king were daily augmented, and prince Edward, his eldest son, afterwards Edward I. with a chosen body of men, entered London, and seized the treasure of the knight's templar, which he conveyed to Windsor castle in order to supply the immediate wants of his father. Negociations nevertheless continued, and the barons began to show symptoms of disaffection to the earl of Leicester, but he, without further delay, convened a parliament, in which the provisions of Oxford were again confirmed: the barons were called upon, by the twenty-four commissioners, to raise an army; and of this army the earl of Leicester was nominated general. A scene of fearful devastation ensued in every quarter of the realm. The foreigners were slaughtered without mercy, and the estates of those who adhered to the king were confiscated.

Robert de Ferrers.

Among the most ardent of those barons who distinguished themselves in the confederacy, was Robert de Ferrers, the young earl of Derby, who had not attained the age of manhood many years, when he levied a large force from among his tenantry, and having ravaged the neighbouring counties, he besieged and took by assault the city of Worcester. A wealthy portion of that city, called the Jewry, was plundered and destroyed, as were the religious houses and other edifices. He was joined there by the baronial army under the earl of Leicester, who had made himself master of the city of Gloucester, after a siege of four days. The united forces then marched upon Shrewsbury, Hereford and Bridgenorth, from which the king's adherents were speedily driven, and then marching southward, they were everywhere received with submission and even with joy.

Civil War.

In the midst of this success, the earl of Leicester and his advisers, with a show of moderation, which was intended to throw the odium of the war upon the king, sent a deputation to Henry, who had fortified himself in the tower of London, offering to annul some of the most obnoxious of the provisions of Oxford, provided he would discard his foreign counsellors. The king, who was closely besieged, promised every thing required of him, but he was no sooner in the hands of his own party, than he put foreigners into his castles, stored them with provisions and prepared for war.

During the progress which the earl of Leicester made in the counties bordering on the Severn, prince Edward led the royal forces into Staffordshire and Derbyshire, where the possessions of the earl of Derby were given up to the pillage of the soldiery, and the castle of Tutbury was seized and demolished. The prince proceeded to Bristol and afterwards to Windsor, but he was compelled to surrender the strong castles of those places into the hands of the confederated barons.

After a short cessation of hostilities, the king and his son having received an accession of foreign troops, and having also been joined by some barons who had taken umbrage at the authoritative behaviour of the earl of Leicester, advanced into the heart of the kingdom. They seized upon Oxford, and expelled from the colleges the students, who had displayed great ardour in the cause of the barons. The town of Northampton was taken

by assault; in which fifteen barons and sixty knights were made prisoners. Among these was William de Ferrers, brother of the earl of Derby, and the ancestor of the branch of that family which settled at Groby in Leicestershire. The taking of Northampton was followed by the surrender of Nottingham, while prince Edward, having marched into Kent, compelled the barons to raise the siege of Rochester and to retire to London. CHAP. 10. Civil War.

These successes induced the king to march hastily upon the metropolis, which he expected to enter without resistance, but finding the citizens drawn out, in arms, and ready to encounter his troops, harassed by the rapidity of their march, he withdrew during the succeeding night, and proceeded towards the coast of Sussex, where he expected to find a re-enforcement of foreigners. He was closely pursued by the earl and confederate barons, together with fifteen thousand Londoners who had assembled in arms at the approach of the king. Leicester, by the advice of Clare, earl of Gloucester, and of Ferrers, the young earl of Derby, sent to the head quarters of the royal army some proposals of accommodation, but the proposal irritated the king's favourites and advisers, whose conduct was severely reprehended in the petition, or rather, remonstrance delivered to the sovereign in their presence. Prince Richard, the brother of the king, had been elected king of the Romans, and in accepting that foreign honour he lost sight of those claims of the barons which he had formerly espoused. He declared the representations of the barons to be false, and uttered threats against the confederates, in which he was joined by prince Edward.

Both armies were then in the neighbourhood of Lewes in Sussex, and were about six miles apart; but immediately on receiving intelligence of the reception which their offers of accommodation had met with, the earl of Leicester gave the word to advance. The battle began with ardour on both sides. Prince Edward, having vowed vengeance against the Londoners, who formed the left wing of the baronial forces, attacked them with such impetuosity that they gave ground and fled before him, while with more impetuosity and rancour than prudence he pursued them several miles, slaughtering all he could overtake. But while the young prince thus gave the reins to his vengeance, the other divisions of the confederate army gained a complete victory over the king and his brother Richard. King Henry surrendered himself to the earl of Leicester, and the king of the Romans to the earl of Gloucester. The castle and town of Lewes submitted to the barons, who conveyed Henry and his brother, as prisoners, to the priory. Prince Edward, returning from the pursuit of the Londoners, was speedily surrounded by the troops of the victorious barons. In this condition he reluctantly subscribed to whatever terms were dictated to him. These terms, which are called the *Mise of Lewes*, insisted upon the inviolable observance of the *Statutes of Oxford*, and required that the prince, together with his cousin Henry, the son of Richard, king of the Romans, should remain as hostages in the power of the confederates, until a parliament should be called which might settle the affairs of the nation, and determine what should be done with the royal prisoners. Battle of Lewes. Henry taken prisoner.

The parliament was called by the earl of Leicester, in the name of the king; and it was on this occasion that knights of the shires are first dis-

CHAP. 10. tinctly mentioned. This assembly nominated nine barons, to whose hands the administration of public affairs was to be entirely entrusted; under the appellation of the counsellors of the king. To this, Henry and his son Edward were compelled to submit, and a government, sufficiently aristocratic as to its form was established, but of which the powers were exercised by Montfort, earl of Leicester.

Knights of the Shires summoned.

The barons had not, however, confederated themselves against the exorbitant dominion of the crown, in order to place an authority still more exorbitant in the hands of the earl of Leicester. One of the first who publicly censured the conduct of Montfort, was the brave young earl of Derby; and for this he was seized and committed to the tower. Gilbert de Clare, earl of Gloucester, resented the arrest of his young friend, and by so doing drew upon himself the wrath of Montfort, who did all he could to exclude him from the public councils. Irritated at such behaviour, the earl of Gloucester sounded the dispositions of others, whom he found equally alarmed at the ambition of Leicester: he formed also an alliance with the lords of the Welsh marches, and having raised a considerable body of forces, contrived to afford prince Edward the means of making his escape.

Escape of Prince Edward.

Many of the confederate barons immediately joined the banners of the prince, who, being called upon by the earl of Gloucester, in the presence of the leaders, to declare that he would restore the ancient laws of the realm, took an oath to that effect. The command of the army was instantly resigned to him by the earl, and he determined to give battle to Montfort, who retreated before him from the banks of the Severn to the eastern extremity of the kingdom. Montfort having received re-enforcements from the Londoners, made a stand at Evesham. The battle that ensued was fought on the 4th of August, 1265. The adherents of Leicester were totally discomfited, and he and one of his sons fell on the field of battle. The king, who, as a prisoner, had been compelled to accompany the earl of Leicester throughout his harassing retreat, was wounded in the shoulder, and would have been slain by a common soldier, had he not exclaimed, "I am Henry of Winchester, thy sovereign." He was conducted to his son, who received him with filial exultation as an assurance of victory.

Battle of Evesham.

This battle, which completely subverted the government established by Montfort and his confederates and restored the king to the throne, was fought fourteen months after the battle of Lewes, in which the king became a prisoner. Henry was not a sovereign who could be taught by adversity to respect the rights and interests of his people. On the contrary, his impatience for revenge was excessive. He called a parliament subservient to his views. The estates of those who had opposed him were confiscated, and the city of London was deprived of its privileges and compelled to pay the sum of twenty thousand marks. This conduct drove the vanquished party desperate. Simon de Montfort, son of the earl of Leicester, fortified Kenilworth castle and seized upon the isle of Axholme in Lincolnshire, from which station he carried on a series of ravages by land and by sea. The earl of Derby armed his tenantry in Derbyshire, and being joined by Baldwin de Wake, who had held large possessions in Lincolnshire, and by John D'Ayville, an aged and turbulent baron of Hode

Ferrers, Earl of Derby.

castle in Yorkshire, with several others, set the newly restored power of the crown at defiance. CHAP. 10.

Ferrers, Earl of Derby.

With respect to the particular circumstances that had excited the earl of Derby to this desperate proceeding, it appears that after the battle of Evesham, so fatal to the cause he had espoused, he as well as Simon de Montfort and some others, was excluded by name from the terms of composition on which others of the insurgents were allowed to redeem their lands, and was summoned to appear in person at the court, then specially held for the investigation of the conduct of those charged with having borne arms against their sovereign. Not then being in a condition to disregard such a summons, and at the same time fearful of placing himself at the mercy of a vindictive prince, he sent submissive letters to the king accompanied with a costly cup of gold adorned with precious stones. This valuable present he is stated to have purchased of Michael de Toni, and to have mortgaged his manor of Piry in Northamptonshire to raise the sum demanded for it. In consequence of this submission, backed by so rich a peace-offering and the intercession of his friends, he was permitted to enter into a composition to pay the sum of fifteen hundred marks, at four several payments within twelve months, as the price of the royal pardon. A special patent was accordingly granted him, with warrant of security against prince Edward and others whom he might have previously offended or injured. This patent bore date the 5th of December, 50 Henry III.

But while Robert de Ferrers was thus negociating his pardon, he obtained information that his friend Clare, earl of Gloucester, who had been so instrumental in restoring the king to his throne, had now seen with indignation the daily abuses of the royal prerogative, and was secretly encouraging the resistance of the discontented. Eager to support the cause in which he had embarked as soon as he became a man, and with an impetuosity but little subdued as yet by years, he waited not for the open declaration of Gloucester, but instantly appeared in arms, with the confederates above mentioned. Prince Henry, the nephew of the king, and son of the king of the Romans, was sent into Derbyshire with a large body of foreign troops, and this youthful general strictly obeyed the instructions he had received in desolating the estates of earl Ferrers, who had now provoked the utmost severity of his sovereign.

Prince Henry ravages Derbyshire.

On the approach of prince Henry, the valiant earl of Derby appears to have endeavoured to collect his forces in the neighbourhood of Duffield, the castle of which he had rebuilt and fortified; and he was joined by Baldwin de Wake with a large body of men from the marshes of Lincolnshire. There he levied contributions from the neighbourhood, and particularly from the town of Derby, resolving there to await the arrival of the Yorkshire men under the command of the veteran D'Ayville. Prince Henry having demolished the earl's castle at Tutbury, advanced in a north-eastern direction across the ridges of the Lower Peak, with the intention of intercepting D'Ayville, who had arrived at Dronfield. The earl saw the necessity of marching northward, and with much difficulty crossed the river Amber, which had overflowed its banks to a very considerable extent. His troops were very much harassed when he effected a junction with

CHAP. 10. D'Ayville in the neighbourhood of Chesterfield, just as that leader was attacked by the royal army. The conflict was severe. Early in the engagement, D'Ayville, who, being far advanced in years, had not strength equal to his courage and dexterity, was unhorsed by the lance of Sir Gilbert Hansard; but he was instantly surrounded by his followers, who beat back his assailants and conveyed their veteran commander from the field of battle. Thence, without remaining to sustain the attack of their pursuers, or perhaps scarcely aware of the arrival of earl Ferrers and Baldwin de Wake, they made the best of the way across the country to the isle of Axholme, which had been fortified as a place of security for the insurgents by Simon de Montfort. This defection was soon perceived by the brave young earl, who saw the fatal consequences of it in the panic that began to be apparent in the Lincolnshire men, who were no sooner informed of the direction taken by D'Ayville and his followers, than they demanded to be led to the same place of safety. Baldwin would fain have persuaded the earl to a retreat, which seemed warranted by discretion, but he could not prevail upon him to leave the county of Derby to the devastations of a ferocious foe. The night approached. The slaughter had been immense on both sides, but although the earl had succeeded in getting possession of the town, he found that his men were exhausted, and that Baldwin, with the men of Lincolnshire, had taken advantage of the darkness and had left him to his fate. Shortly after midnight, prince Henry, having allowed his soldiers a short interval of rest and refreshment, seized upon the entrances of the town, and having set fire to a few buildings, threatened to destroy the place unless earl Ferrers was instantly delivered into his hands. Some skirmishes ensued in the principal street and market-place, but the inhabitants were chiefly inclined to yield to the demands of the prince, so that the followers of the gallant earl were easily overpowered. The earl himself sought concealment in the cloisters of the church, where some sacks of wool belonging to the traders at the Whitsuntide fair had been deposited, as was frequently the case at that period. A woman betrayed him; whether actuated by treachery, as is stated in an old manuscript, or acting under the authority of the magistrates, is uncertain. He was made prisoner and sent to Windsor castle. The parliament, which was shortly afterwards summoned to meet at Westminster, decreed the total confiscation of his estates, and prince Edmund, the king's second son, was invested with the earldom of Derby. That this prince was put in possession of all the estates claimed or held by earl Ferrers at the time of the battle of Chesterfield, there can exist no doubt, but there is reason to believe that the earldom remained dormant for some years.

Battle of Chesterfield.

Earl of Derby.

This unhappy, but spirited young nobleman, remained in prison about three years. During that period, his friend Clare, earl of Gloucester, having made a league with Llewellyn, prince of Wales, and while the king marched with a considerable army to suppress the insurgent barons who had assembled their forces in the isle of Ely, suddenly entered the city of London, where he was well received. The tower of the metropolis instantly surrendered to him, and had earl Ferrers delayed the insurrection in Derbyshire for a few months, the baronial confederacy would again have been completely successful, and the government of the kingdom would

have been entrusted to the earl of Gloucester, a man of more principle, of less ambition, and of higher patriotism than Montfort. The discomfiture of earl Ferrers and his confederates had intimidated the barons on the north of the Trent. They would not venture to call upon their tenants, and prince Edward marched through the territories, compelling them and their tenants to join him, and at length encamped at Stratford, a few miles east of London, where he was re-inforced by a large body of foreign troops, newly arrived in the Thames, under the command of the earl of Boulogne. Nothing was left for the earl of Gloucester but to make his submission: he was in a position to demand honourable terms, and having obtained assurances that the city of London should neither be fined nor deprived of its Charter, and that the estates of his friends should not be confiscated, he retired wholly from public life during the remainder of that reign.

Gloucester's insurrection.

In the year 1269, on account of the powerful intercession made by the friends of earl Ferrers, the royal precept was directed to prince Edmund, commanding him to make restitution of his the Earl's lands, but it contained a condition that the prince should receive, at one entire payment, on an appointed day, the immense sum of fifty thousand pounds. This condition, in fact, negatived the grant; for it was manifestly impossible for the unfortunate earl to raise a sum, equivalent to nearly a million and a half of our present currency, from his distressed tenantry; and we are astonished when we find a long list of princes and barons mentioned as his sureties, including the name of his captor, prince Henry, the son of the king of the Romans. To these sureties he granted, by way of counter-security, all his lands and castles, except Chartley in Staffordshire, and Holbroke in Derbyshire. The day appointed for payment, which had been fixed at a fortnight before the festival of St. John the Baptist arrived, and the sureties immediately passed over their title to prince Edmund. It is manifest that there existed no actual intention to restore to the earl his estates; but the king and his advisers did not like to proceed to a direct act of confiscation, which might have created alarm in the whole body of his very unsettled nobility.

Earl Ferrers.

At the ensuing Easter Term, the earl brought an action in the Court of King's Bench, complaining that although he had been desirous to redeem his land in the manner provided for in those articles of surrender agreed to at the capitulation of Kenilworth, called the *Dictum de Kenilworth*, yet they were unjustly withheld from him by prince Edmund. This plea was not likely to avail him at a period when those to whom the estates of the insurgent barons had been given influenced the courts of law; but in the second year of the ensuing reign he renewed it, and prince Edmund, being called upon to reply to it, he rested his claim entirely upon the forfeiture of the deed for fifty thousand pounds.—In his replication, the unfortunate earl states that the deed was presented to him to sign and seal while he was in Chippenham castle, to which he had been conveyed from Windsor, and that he executed it under the serious apprehension of corporal injury. He adds, that when he had signed it, instead of being set at liberty, he was conveyed by a strong guard of armed men to the castle of Wallingford, where he remained three weeks in restraint, until prince Edward, after-

He brings an action for restitution.

CHAP. 10. wards king, procured him his liberty.—The royal defendant contented himself with answering that the deed had been executed in the presence of the Chancellor, John de Chishull, and that as the chancellor represented the king, it could not be pleaded that the deed was executed by the Earl as a prisoner, every man being free to appeal to the sovereign, in whose presence he stands against compulsion.—Upon this absurd plea, the court dismissed the suit.

Earl Ferrers' suit for restitution.

Thus the extensive manors possessed by the family of Ferrers in the counties of Stafford, Derby, Leicester and Lancaster, became the property of a prince of the blood royal, while the unfortunate earl retained only the castle and manor of Chartley in Staffordshire and the hamlet of Holbrooke in Derbyshire. This elder branch of the Ferrers were subsequently distinguished as the Ferrers of Chartley. The widow of Robert de Ferrers was not deterred by the decision of the court of law from suing for the dowry which had been settled upon her out of her husband's possessions, but prince Edmund put in the same plea as before, and obtained a verdict in his favour. He thought it prudent, however, to be secured from all future process, by a general release of all her right of dower in those lands, and upon condition of such release, he gave her the manor of Godmanchester in Huntingdonshire to hold for life.

Segrave.

We cannot close the incidents connected with Derbyshire, during the reign of Henry III. without some reference to the rise of the family of Segrave, which in this and the subsequent reign attained considerable eminence. This family was probably of Saxon origin, and had assumed the name of Segrave from a manor in Leicestershire. Early in the reign of Henry III. we find Stephen de Segrave appointed a justice itinerant in the counties of Nottingham and Derby, and in possession of the manor of *Cotes*, or *Chilcotes*, in this county. According to Dugdale, in the year 1231, he obtained the custody of numerous castles and counties, and was allowed the whole profits of those counties for his support in that service, with the exception of the ancient farm rates. Having been for many years of the king's council, and chief justice of the common pleas, he was, on the removal of Hubert de Burg, appointed to the eminent office of justiciary of England. His rapid rise was greatly owing to the favour of Peter de Roches, the bishop of Winchester, who, says our author, finding him a flexible man, made much use of him. The height of power to which Stephen de Segraves had arrived was not seen without the jealousy and indignation of the nobility and of the bishops, particularly as he greatly favoured the usurpations of the church of Rome, and obtained a dispensation from the pope to enable one of his sons, who had been brought up as a clergyman, to hold as many church preferments as he could acquire for him. In consequence of the discontent excited by his conduct, his manor house at Segrave was destroyed, and goods to a great value consumed by fire, and his manor house at Alkmundbury was likewise plundered and burnt. As he was then attending the king on a journey in the county of Huntingdon, he saw flames at a distance, and on enquiring what was the occasion of them, he understood that a new acquisition of his at Alkmundbury in that county was being plundered and destroyed by a party of in-

surgents. He immediately rode to the spot with a considerable retinue, but when he saw that the mob was countenanced by some powerful men, and heard the reproaches with which his conduct was assailed on every side, he put spurs to his horse and made a hasty return to the king. He endeavoured to disguise the causes of the disaffection, which Henry, easily misled as he might be by the representations of those whom Segrave and the bishop had placed about his person, could not but perceive. Edmund, the archbishop of Canterbury, had obtained much influence over the wavering mind of the king, and this prelate lost no opportunity of representing to him, that it was for his own interest, as well as that of the nation, to remove from his counsels ministers who had become so odious to his subjects. In consequence of this urgent advice, Henry sent his express commands to the bishop of Winchester to retire to his diocess, and ordered Stephen de Segrave, Peter de Rivaulx (the bishop's natural son, who had been appointed treasurer) and many others who had borne sway at court, to appear at Westminster, and to answer for waste and embezzlement of the revenue as well as the complaints of persons injured by them. Being conscious of their guilt, Stephen de Segrave took sanctuary at Leicester abbey and the others sought protection in various monasteries. Fearful of the consequences of surrendering himself, Segrave openly declared that he had been and still was a priest. He applied to become a canon of that religious house, on which he had bestowed some lands he possessed at Stockingford in Warwickshire, and was about to submit to the tonsure, when by the persuasions of the archbishop of Canterbury, who offered him his protection, he ventured to appear at court. Henry, on beholding him, called him a wicked traitor, and alleged against him that it was by his particular counsel that Hubert de Burg was displaced from the office of justiciary and cast into prison. The king added, that Segrave had earnestly advised him to hang Hubert and to banish many of the English nobility; and concluded by insisting upon a strict account of the money which had passed through his hands whilst he was justiciary of England. By the intercession of the archbishop he obtained a pardon, on condition of paying a fine of one thousand marks to the king; but this was not publicly granted until the irritation of the public mind had subsided. He was soon after received again into favour by Henry, who reconciled him with several of the barons whom he had offended, and made him justice of Chester; but he was advanced in years, and his ambitious spirit had been so subdued by the disgrace and danger he had incurred, that, after a short time, he sought retirement in the abbey of Leicester, where he professed himself a Canon Regular, and remained to the day of his death.

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Segrave Justiciary.

His disgrace.

Gilbert, the second son of Stephen de Segrave, rose to some eminence. He inherited his father's estates, in consequence of the death of his elder brother during the lifetime of his father. The castle of Bolsover was committed to his government, and afterwards that of Kenilworth. He was also appointed justice of the forests south of the Trent, and subsequently one of the justices in the city of London, to hear and determine such causes as had usually been tried before the justices itinerant at the tower. In the year 1254, when returning from Gascony, he was seized at Ponte in Poictou

CHAP. 10. and thrown into prison, where he was treated with such severity, that shortly afterwards, on his return to England, he died.

Nicholas de Segrave.

Nicholas de Segrave succeeded his father Gilbert. He united himself with the barons under Montfort, and was one of those who endeavoured to compel the king to submit to the ordinances of Oxford. He is said to have bestowed church livings upon schismatical persons, but it is difficult to understand what is meant by schism at that period. He probably supported those clerical men who, with Grosteste, the celebrated bishop of Lincoln, insisted upon the independence of the church of England. He was, however, particularly excommunicated, on that account, by the archbishop of Canterbury. At Northampton we find him in arms against the king, and when the royal army took that place by assault, he fled to London. There the citizens, who had raised troops in aid of the barons, made him their general, and he marched with Gilbert de Clare and Henry de Hastings to the siege of Rochester, and was afterwards present at the battle of Lewes, in which the king was defeated and made prisoner. At the victory obtained by prince Edward, he was himself taken prisoner, after being severely wounded, and his lands were given to prince Edmund; but subsequently, being admitted to composition, in virtue of the terms obtained by the brave defenders of Kenilworth, he, under the surety of Geoffry de Grenville and some others, obtained a full pardon, and the restitution of his manors, with the power of taxing his tenants for the amount of his composition. Such power seems to have been generally granted, and it probably had the effect desired by the court, of irritating the tenantry against the great land-owners, and of causing them to look to the crown for protection. It is certain that the barons, thus circumstanced, began to be uneasy and mistrustful; and the tenants, called upon to send knights of the shires to parliament, generally sent men attached to the court, who struggled hard to take this power of taxing them from the barons, and at length succeeded in establishing the law of parliament, that the king should advise with them, before he consulted the barons, concerning any fiscal ordinance.—Nicholas de Segrave attended prince Edward to the Holy Land. His possessions were large, and in this county he held Bretby, Rosliston and Chilcote.

Family of Bardolf.

The family of Bardolf was connected with this county in the reign of Henry III. when William de Bardolf held Ockbrook and Elmton in Derbyshire, besides extensive manors in Norfolk, Lincolnshire and Sussex, together with the manor of Shelford in Nottinghamshire. He adhered to the king during the confederacy of the barons under Montfort, earl of Leicester, and was made prisoner at the fatal battle of Lewes.

Briwere.

William Briwere was much distinguished during part of the reign of Henry III. and in the reigns of his father, his uncle and his grandfather, chiefly for his constant adherence to the crown during those turbulent periods. He stood so high in the estimation of Richard I. that when that sovereign set out on his expedition to the Holy Land, he and Hugh de Bardolf (the uncle of the above-mentioned William) were the two lay-commissioners, who with the bishops of Durham and Ely, to whom the administration of justice, according to the laws and customs of the realm,

was entrusted. When Richard, then in Palestine, had received intelligence that the bishop of Ely had abused his trust, the other commissioners were appointed by his special letters to superintend the administration of the laws. Irritated by this exclusion, the bishop excommunicated William de Briwere and his colleagues, and had sufficient influence to obtain of the pope a confirmation of this display of ecclesiastical authority. It was however of little avail in lessening the estimation in which Briwere was held; and when Richard was brought prisoner to Worms in Germany, he was one of the principal persons sent to treat about the royal ransom. The places of trust to which he was called, and the matters of high arbitration which were confided to his decision, are proofs of his character for probity and wisdom. It was in the 6th of John that he obtained a grant in fee-farm of the manor of Chesterfield, with Brimington and Whittington; and of the soke and whole wapentake of Scarsdale. During the tumults of that reign he was appointed one of the commissioners who had charge of the royal forces, and early in the reign of Henry III. he was entrusted with the command of the castle of Newcastle-upon-Tyne. But however we may admire the integrity of this eminent baron, we cannot but lament his attachment to those arbitrary principles, that, during a great portion of his long life, had caused such dissensions between the barons and the crown, and had carried desolation into every district of the kingdom. When the parliament, as it was then constituted, was assembled at Westminster, in the January of the year 1223, the arbitrary conduct of Hubert de Burg had been brought under consideration, it was resolved to petition the young king, then in his sixteenth year, that he would be pleased to cause the Charters of their liberties, signed by his father and sworn to by himself, to be strictly observed throughout the kingdom. A deputation, headed by the venerable Langton, archbishop of Canterbury, presented the petition to the king in council, and the archbishop, pleading in behalf of a cause which he had so long and so strenuously espoused, insisted that Henry could not in the face of heaven refuse to yield to their request, as he had, on the departure of the Dauphin, sworn in presence of the assembled peerage of England, that those Charters should be observed. Upon this, William de Briwere, who was one of the king's council, arose and declared that *it was unreasonable of the parliament to require the execution of Charters, which had been extorted by force.* The archbishop replied, "*William de Briwere, if thou didst love the king, thou wouldst not, in thine old age, strive to be an hinderance to the peace of his realm.*" Langton said this with tears, and the king, perceiving how much he was moved, exclaimed, "*We have sworn to the observance of these Charters and our oath must be maintained.*" Orders were immediately sent to the sheriffs, not indeed commanding the observance of the Charters, but directing the summoning of twelve lawful and discreet knights in each county, who might declare what were the liberties enjoyed in such county during the reign of king John, and further directing that such liberties should be strictly respected. This was clearly an evasion of the prayer of the petition; but as the parliament was unacquainted, for some time, with the true nature of the precepts transmitted to the sheriffs, a subsidy was gratefully voted to the king, and this answered the temporary purpose of the deceitful and tyrannical court.

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William de Briwere.

This William de Briwere died at a very advanced age, leaving several daughters and an only surviving son, who seems not to have taken any very active part in the public transactions in that interesting period. He died without issue and his sisters became his joint heiresses.

Grey of Codnor.

Richard de Grey, of Codnor in this county, was a distinguished baron, strongly attached to the party of the king during the last troublesome years of the reign of king John. On that account he had a grant of the confiscated lands of John de Humez, in Leicestershire, and was made governor of the Norman islands of Guernsey and Jersey. In the year 1252, he and his brother John were among the very few who offered to accompany Henry III. in his proposed expedition to the Holy Land, which the nation, notwithstanding the urgent preaching of the bishops of Winchester and Chichester, believed to be only a pretence for an extraordinary levy of money. So delighted was Henry to find his project supported by barons of such influence, that he publicly embraced the two brothers, kissed them and called them his fraternal associates. The king soon after relinquished his purpose, and Grey was appointed constable of Dover and warden of the Cinque ports. In this capacity he behaved with great integrity, but having discovered that Dover castle had been, by the connivance of the former governors, made the receptacle for the immense spoil of which the king's Poictevin troops had plundered the country, he was indignant at having been appointed to so dishonourable a post, and divulged the fact to Montfort and the confederates, who joyfully accepted the junction of a baron of his power and reputation to their party. He was accordingly entreated to retain his command, in their name; and when the barons met at Oxford, he was nominated as one of the commissioners on their part, who framed the provisions of Oxford, and became the baronial council of the earl of Leicester. An incident however occurred which created some mistrust in the minds of the confederates, and he was deprived of the command of Dover and the Cinque ports. The parliament assembled by Montfort passed an act for the perpetual banishment of the foreigners who had been the favourites and advisers of the king, and in the act, the uterine brother of Henry, Athelmar, bishop of Winchester, was particularly named. As this weak monarch had placed much confidence in this foreigner, he kept up a secret correspondence with him; advising him to procure the pope's authority for his residence at the see of Winchester, and then to return to England in defiance of the decree of parliament. A bull was obtained to this effect. Athelmar advanced as far as Paris on his way to this country, and sent before him the papal injunction, by the hands of a friar named Velasco, who was permitted, unexamined, to land at Dover. On hearing of this, Roger de Bigot, then justiciary of the realm, was despatched by the baronial council, to enquire by what authority the friar had been suffered to come on shore and publish a papal edict so detrimental to the government then established. The constable of the castle pleaded that the friar was a messenger who bore the king's signet; but this only served to irritate the barons. The justiciary was again sent to divest him of his post, in doing which he said, in the name of the counsel, "Richard de Grey, you being entrusted by the people of England, as a faithful warden of the ports, have suffered this person to land, without our knowledge, to

the manifest violation of your oath. We esteem you, therefore, to be no longer worthy of this important trust; and we determine that you be further questioned respecting a transgression tending to the public damage of the whole realm." Lord Grey, notwithstanding this occurrence, remained attached to the barons' party, and was at Kenilworth with Simon de Montfort the younger, at the time when the earl of Leicester was victoriously marching from town to town along the vale of the Severn. About the same period, he and his son John having raised some re-enforcements from his various manors, was endeavouring to effect a junction with the confederates, when he was surprised in the night, by a division of the royal army under prince Edward, and both himself and his son were made prisoners. His estates were immediately confiscated, but three years afterwards, in consequence of the terms obtained by the barons at the capitulation of Kenilworth castle, he was admitted as one of those who were allowed to compound for their possessions.

Grey, of Codnor.

Other branches of the illustrious family of Grey were connected with this county, at the period of which we are writing, but they will be found mentioned under the names of the manors they possessed, in the Parochial portion of our History.

The earls of Chester were connected with this county, not only by their family alliance with the Ferrers, but by the possession of the ancient manor of Repton and other royalties on the south of the Trent. We have already noticed the conduct of the brave earl Ranulph, surnamed de Blondeville, on account of his having been born at the White Monastery in Powis-land, when Lincoln was taken by the royal forces early in the reign of Henry III. He visited the Holy Land, where he made many displays of his valour, and an incident related concerning his conduct on his voyage homewards is an amusing characteristic of the superstition then prevalent. During a dreadful storm, being requested by the master and the crew of the vessel to lend his aid for their common preservation, he told them to continue their labours until midnight, when, if the tempest should not abate, he would assist them; but he would do nothing until that time.—The storm increased: midnight arrived, and the master of the vessel called upon him to join in prayer with him and the crew for the salvation of their souls, for all hope of safety in this world was at an end. "Not so," replied Ranulph de Blondeville; "for, know ye, the hundreds of holy monks and nuns established and endowed by my forefathers and myself in different parts of my possessions in England, are at this hour of midnight rising to sing divine service. I put confidence in their unity of prayer, and already I feel my strength increased." With that he took an oar in his hand and called upon the crew with words of encouragement. Their energy prevailed, and ere the morning dawned, the tempest had subsided, and they found themselves safe in a friendly port.—On his return to his native country, he opposed the arbitrary power displayed by Hubert de Burg, and notwithstanding his superstition, he most resolutely refused to permit the commissioners of the pope to levy their demands within the compass of his jurisdiction. He died in the year 1232, at Wallingford, after he had governed the palatinate of Chester for more than fifty years. An old his-

Ranulph de Blondeville.

CHAP. 10. Ranulph de Blondeville.

torian relates, that, on the day of his death, a great company in the likeness of men, with a certain potent person, hastily passed by a hermit's cell near Wallingford. The hermit asked one of them what they were, and whither they were wending so fast?—The one thus questioned replied, "We are devils, and are making speed to the death of earl Ranulph, to the end we may accuse him of his sins."—The hermit, hearing this, adjured the devil to return the same way within thirty days, and let him know what was become of the earl. The devil thus adjured, came accordingly and said, "That the earl had been, for his iniquities, condemned to the torments of hell; but that the great white dogs of Deulacre,* and with them many others, did bark so incessantly, and fill the habitations of the devils with such a noise, that their prince expelled the earl from his dominions; and it is thus that the dogs of Deulacre have by their continual barking effected the liberation of many souls."—When the news of the earl's death was brought to Hubert de Burg, by a messenger, who expected to rejoice him by the intelligence that one of his most decided enemies was dead, that statesman, who, notwithstanding the arbitrary principles of his government, possessed more of the generous temperament of the soldier than of the cold policy of the minister, sighed deeply, and exclaimed, "God have mercy on his soul;" and, being then fasting, he called for his psalter; knelt before the crucifix, and sang the whole of it through without intermission, for the salvation of the soul of his deceased opponent. We may smile at the justiciary's superstition, but if we enter into the opinions that then prevailed, we cannot be insensible to the generous feeling that was mingled with this, to us almost ludicrous, act of mistaken piety.—The first wife of earl Ranulph was Constance, of Bretagne, the same whom Shakspeare has immortalized in our dramatic poetry as an example of maternal sensibilities aroused in defence of the rights of her injured son. We confess we are somewhat startled, when we find this same Constance abandoned by her second husband, earl Ranulph, "by reason," say the Chronicles of Evesham, "that king John haunted her company." We cannot enter into these pretended suspicions of the noble earl, nor imagine for a moment that such a woman as the Constance of Shakspeare could in the slightest degree encourage the persecutor and usurper of her son's rights, her licentious brother-in-law, "to haunt her company;" particularly as we find it intimated by the same authority, that "by the advice and example" of king John, the earl divorced his wife, and espoused Clementia, the daughter of Ralph de Fengares and the youthful widow of Alan de Dinant, with whom he obtained great possessions both in France and England. Constance, almost as soon as she was divorced, married Guy de Thouars, the younger brother of the count de Thouars, and died in child-birth within a twelvemonth afterwards. Clementia had the manor of Repton, with other manors in Lincolnshire and Cheshire, assigned her for her dowry; but as the earl left no progeny, the earldom descended to John, surnamed the Scot, the son of his eldest sister Maude, wife of David, earl of Huntingdon; and the immense possessions enjoyed for nearly two centuries by the descendants of Hugh Lupus were divided between Maude and her three sisters as

* The earl had founded the monastery of Deulacre, at Leek in Staffordshire, for white friars.

co-heiresses. In eight years after the death of earl Ranulph, expired his nephew, John the Scot, the last earl of Chester, without issue, poisoned by Helena his wife, the daughter of Llewellyn, prince of Wales. These unhappy espousals had been brought about by the policy of earl Ranulph, who by means of them secured certain present privileges, and expected that the regalities of that old British principality would one day be enjoyed by his sister's descendants. On the demise of earl John the Scot, the prerogatives of the palatinate were assumed by the crown, on the plea "*ne tam præclara dominatio inter colos fœminarum dividi contingeret.*"—"Lest it should happen that so illustrious a dominion should fall under the divided sway of the distaffs of women." CHAP. 10. Ranulph de Blondeville.

The reign of Edward I. does not present to our attention many events closely connected with this county, but it is too important in the annals of the kingdom to be passed over in silence. During the latter years of his father's reign, this prince had given proofs of his courage and prudence, which inspired the country with confidence, and firmly attached to him those barons who had been in continual insurrection against the authority of his weak-minded predecessor. When his father died, he was at Messina in Sicily, on his return from Palestine, but his absence occasioned no troubles. At the funeral of Henry, which took place on the 20th of November, 1272, the earls of Warren and Gloucester, with a large body of the ecclesiastics and the laity, went up to the altar and swore fealty to his son Edward. The regency was entrusted to the archbishop of York, the earl of Cornwall and the earl of Chester; and a parliament was summoned which consisted not only of the lords spiritual and temporal, but of knights of the shires and representatives of cities and towns. Edward I.

Soon after the arrival of the king, he resolved to enforce the vassallage of Wales, which, though acknowledged on the part of the sovereigns of that country, had not been strictly observed. During the baronial contests, the earl of Leicester and the earl of Gloucester had derived considerable aid from Llewellyn, the sovereign of that principality. At the accession of Edward, the Welsh prince was summoned to assist at the coronation of the king and queen, and to do homage for his territories: he refused, and Edward considered this refusal as a sufficient cause for the commencement of that war of subjugation which he already meditated. Some delay occurred, as the king had resolved to place the laws and institutions of the kingdom, which had been greatly disturbed during the troubles of his father's reign, on a solid foundation. He summoned several parliaments, which sat during the years 1275 and 1276; and in these legislative councils a series of statutes were passed, regulating as well the liberties of the people as the immunities of the church. Llewellyn of Wales refuses to do homage.

In the spring of 1277, Edward made his first expedition into Wales. He seized the castles of Flint and Rhudlan, the fortifications of which he improved and enlarged; securing by that means, two strong positions for the purposes of invasion and retreat. Having driven the Welsh into the forests which covered the valleys of North Wales, and subjugated the isle of Anglesea, he listened to the supplications of Llewellyn, and granted him peace, upon the condition of his paying fifty thousand pounds sterling, for First Expedition into Wales.

CHAP. 10. the expenses of the war; and a thousand marks annually, for the restoration of Anglesea.

Legislative enactments.

Edward, having reduced the Welsh prince to obedience, devoted his time to that course of improved legislation, which the disorders of the two preceding reigns had rendered absolutely necessary. He caused the coin to be rectified. The adulteration of the silver had been very great, and loans had been made by the Jews, to the barons, on mortgages, in a species of money, which had no intrinsic value. During the confusion of the times, this money had been permitted to get into circulation, to such an extent, that the issuers of it, who were the bankers of that period, accumulated prodigious riches at the expense of the community. Edward was the first of our sovereigns who fixed, by law, the standard of the coin. It was determined by parliament, that a pound of silver, in money, should weigh eleven ounces and two-pence farthing in pure silver, and seventeen pence three farthings in alloy. A trial piece, weighing a pound, made according to this enactment, was placed in the king's exchequer, and denominated a *pound sterling*. To have repaid the Jew bankers in this standard coin would have created intolerable distress; and, although their falsification of the currency had been countenanced, if not actually encouraged, by the governments both of the king and the barons during the late reign, they were themselves stigmatized and delivered up to the vengeance of the public. In every town the Jews, without any discrimination of age or sex were arrested, and two hundred and eighty of these unhappy people were condemned for the crime of issuing light and base money, in loans, for the interest of which they had claimed payment and interest in the new and pure coinage of the realm. Many of these were women, heiresses of wealthy Jewish families. They were all executed without mercy; and the mortgage deeds were cancelled. This was a dreadful expedient; but we can easily apprehend, from what we have seen in our own days, that the depreciation and subsequent correction of the currency, had rendered the distress of the debtors so intense, that the minds of the community were prepared for this sacrifice of the depreciators, while, in this terrible instance, the general abhorrence of Judaism served to stifle the voice of humanity even in the most conscientious.

The Coin rectified.

Jews seized and hanged.

Other important measures were necessary. During the recent troubles, many persons had sought refuge in the monasteries, making those religious establishments the temporary holders of their lands, and confiding to their care, jewels, plate and other personal property. In numerous instances males of all ages had undergone the tonsure, and females had taken the veil; but the piety of circumstances is not durable, and not only did the tranquillity of the realm and the enactment of good laws extinguish much of this devotion, but the heirs of estates, thus sacrificed to the safety of their immediate occupants, began to cry aloud against such an appropriation of their inheritance. The clauses of the Great Charter had expressly forbid all persons to alienate their lands to the church; but the royal party had, on this very account, pretended to regard such alienations as acts of piety, for which some respect ought to be shown even in cases of confiscation. It was not surprising, therefore, that the wealth of the monasteries

Statute of Mortmain.

had enormously increased. The discontent that prevailed on this subject required instant attention. Edward gave his whole mind to the rectification of so serious an evil. He advised the enactment of a law, by the parliament, in which the clauses against such alienations contained in the Great Charter were made the ground-work of a series of provisions preventive of such sacrifices. This enactment was called the law of *Mortmain*, and was intended to prevent estates being bequeathed or bestowed by the *hands of the dead*, or from falling into the *hands* of those who are not employed in the secular business of the world. CHAP. 10. Statute of Mortmain.

There was another evil that had grown out of the uncertain state in which property had been placed for more than half a century. Manors had been seized and occupied without any legal grants: compositions remaining unpaid had warranted some of the lowest servants of the crown to assert claims to lands, of which they had been put into the temporary possession; and indeed, so disordered had been the condition of the country, that estates taken from the confederate barons, and bestowed upon foreigners who had subsequently been banished, seemed to have reverted to the crown. Edward probably proposed to acquire, through parliament, a legalized assumption of such estates by the crown, when he and his ministers called upon the legislature for that enactment, which has since been known by the name of the statute of *Quo Warranto*. By this statute he was enabled to demand of all landowners, that they should lay their titles or title-deeds before the judges of the realm. Such a power in the crown awakened much jealousy. Some of the most distinguished peers, among whom the earl of Warren is particularly mentioned, replied to this demand, "that they had gained and maintained their estates by their swords, and by their swords they would retain them." In many instances, owners of land, whose estates had been for generations in the possession of their ancestors, could not state, by *what warrant* they held either the territories or the rights which they exercised over them. Thomas de Furnival, who at that period held the manors of Eyam and Stoney Middleton in this county, together with Worksop in Nottinghamshire and Sheffield in Yorkshire, states, in his answers made to such inquisition, first the names of his manors, and secondly the rights of fairs and markets, and of criminal jurisdiction; concluding with the acknowledgment of "*quo warrant' ignorat' et a quo tpē ignorat'*, 'by what warrant or from what time they have been so held is unknown.' Edward soon perceived the difficulties and the dangers that would attend the enforcement of this statute, and therefore permitted the proclamation he had issued to sink gradually into neglect. Statute of Quo Warranto.

While he was thus busied in the works of peace, the revolt of the Welsh prince Llewellyn again turned his attention to military affairs. Llewellyn was brave, but his valour was more allied to ferocity than prudence. Surrounded by the bards of his country he listened to the excitements of imagination, and convinced himself that he was *the childless prince*, who, according to the prophecies of Merlin, *was destined to restore the empire of the Britons over the whole island, and bequeath it to his nearest of kin*. His brother David, whom Edward had formerly protected from his injustice, now encouraged this romantic persuasion, and insisted that the moment of Revolt of the Welsh.

CHAP. 10. commencing this grand design by the deliverance of Wales from subjugation was at hand. In order to give efficacy to his persuasions, David suddenly, in the spring of 1281, attacked the castle of Hawardine in Flintshire, which had been entrusted to the command of Roger de Clifford, who had long distinguished himself by his activity in repressing the turbulence of the Welsh, and had, by Edward, been nominated justice of Wales, a title and office which served to increase the irritation of the Welsh princes. The castle was taken, and the governor was made prisoner. Encouraged by this exploit, the Welsh prince extended his ravages across the borders and defeated the earl of Warren, who possessed the castle of Dynas-Brian and several manors on the Welsh confines.

Revolt of the Welsh.

Second Expedition against Wales.

Edward, on receiving intelligence of these events, resolved upon the complete subjugation of the Welsh principality, and immediately began to make military preparations adequate to this important enterprise. Among those who were summoned to serve in this expedition, we may mention a few who held possessions in Derbyshire.

William de Ferrers.

William de Ferrers, the brother of the brave but turbulent Robert, earl of Derby, had his principal residence at Groby in Leicestershire, while he held the manor of Walton on Trent and some other possessions in this county. He attended the king in person upon this occasion.

William de Bardolf.

William de Bardolf descended from a Norfolk family, that had risen into opulence during the troubles of the last reign. His father had been attached to the royal party, and was taken prisoner with Henry III. at the battle of Lewes. Henry had conferred upon him numerous manors out of the confiscated estates of the confederated barons, in Leicestershire and in the counties of Nottingham, Lincoln, Sussex, Norfolk and Derby. In this county he held Ockbrook and Elton. This William de Bardolf, who attended Edward I. personally in the expedition against Wales, had very recently come into possession of these estates, and had scutage allowed him of all such tenants as held of him by military service.

Henry de Grey.

Henry lord Grey, the grandson of lord Richard Grey of Codnor, already mentioned, was also with the royal army on the Welsh expedition.

Ralph de Cromwell.

Ralph de Cromwell was of an ancient family which had risen to the barony of the realm during the reign of John. His father had adhered to the confederated lords, but made his peace at court by the payment of sixty marks and a palfrey. He also delivered up his eldest daughter as an hostage to that amorous monarch; and subsequently obtained not only a restitution of his lands but some augmentation of them. His son held possessions in the counties of Warwick, Leicester, Buckingham, Gloucester, Nottingham and Derby: in the last of which he held West Hallam and Winfield. He attended the king in person and had scutage of his military tenants.

The family of Deincourt had held large possessions in Derbyshire ever since the Conquest, but had greatly diminished them by donations to the monasteries. Edmund, the fifth in descent from Walter, who accompanied the Norman duke into England, was personally in the expedition of Edward I. against Wales. His possessions in Derbyshire, at that time, seem to have been reduced to the manors of Holmesfield, Elmton and Cresswell.

Lacy, earl of Lincoln, was, at that period, a very young man. As he held estates in Cheshire he was personally interested in the Welsh wars, and accordingly accompanied Edward with a considerable force of his armed tenantry. His connexion with this county, consisted only of "a certain wapentake at Risley, held every three weeks of the manor of Knesale." He also possessed the castle and town of Donington on the southern borders, but separated from Derbyshire by the river Trent. Lacy, Earl of Lincoln.

Sir Nicholas de Stafford attended the king in his expedition for the conquest of Wales. He probably held possessions in the south-west district of this county, for we find his immediate descendants reckoning Chilcote among their manors, and the Gresleys, who still hold several lordships in that neighbourhood, derive their lineage from Nigel de Stafford, who, with his brother Robert de Stafford, accompanied William the Conqueror from Normandy, and obtained no less than eleven manors in this county. Sir Nicholas de Stafford.

Concerning Gilbert de Clare, earl of Gloucester, we have already made considerable mention. His extensive possessions in Wales gave him an interest in the impending expedition; and on being summoned he cheerfully brought his tenants to the field. He held manors in fifteen counties, among which Derbyshire is named, but his particular lordships in this county are not specified.

Norman D'Arcy, one of the ancestors of a distinguished family who for some generations held Eckington in this county, served king Edward so valiantly in the Welsh expedition, that he had, in recompense, an assignation of fifty pounds per annum in land for five years. He, as well as his father, his uncle and his brother, had been deeply engaged in the baronial confederacies during the two preceding reigns, and had more than once compounded for their estates, which then lay almost wholly in Lincolnshire. Norman D'Arcy.

Roger de Clifford the younger had, at the period of Edward's Welsh expedition, very recently espoused Isabella, one of the co-heiresses of Robert de Vipont, whose wife Idonea was the sole heiress of John de Busli, the fourth in descent from Roger de Busli, on whom the Conqueror had bestowed eight manors in Derbyshire. This Roger and his father (of whom we have made mention above) were both engaged in the Welsh wars, and were both unfortunate: the father having been made prisoner at Hawardine castle, and the son slain at the passage of the Conway.

John de Musard was the sixth in descent from Ascoit de Musard, on whom the Conqueror had bestowed six manors in Derbyshire. He was not completely of age at the period of the Welsh expedition, but was ordered to provide two soldiers for the king's army. The principal seat of this family was at Staveley. This young baron died at the age of twenty-three, and his estates, after a short period of inheritance by his uncle Nicholas, became the property of Sir Ralphe Frescheville, whose father had married Amicia, the aunt of John de Musard. John de Musard.

Nicholas de Segrave, grandson to the justiciary already noticed, was a man greatly respected by the confederated barons, during the latter part of the reign of Henry III. At the battle of Lewes he headed the Londoners, who were defeated and pursued far beyond the field of battle by prince Edward, while the rest of the baronial army vanquished the re- Nicholas de Segrave.

CHAP. 10. maining royal forces, and took prisoners the king and his brother. From the acknowledged military skill and bravery of Nicholas de Segrave, it may be fairly concluded, that the flight of him and his Londoners was a stratagem to draw off prince Edward from the general engagement. At the battle of Evesham, Nicholas was severely wounded and made prisoner. His estates were confiscated, and bestowed upon Edmund, the king's son, but claiming afterwards the benefit of the terms obtained by the barons on the surrender of Kenilworth, he was permitted to make composition for his possessions. He held, at that time, in this county, Bretby, Rosliston and Cotes. When prince Edward prepared for his expedition to the Holy Land, Nicholas de Segrave solicited and obtained leave to accompany him; and on that prince's return to England as king Edward I. he stood high in his monarch's estimation. During the first expedition into Wales, Nicholas de Segrave commanded a division of the royal army; and was present at the taking of Rhudlan castle. In the 9th year of the reign of Edward, John, the eldest son of Nicholas de Segrave, was taken prisoner in Scotland, where he had accompanied Sir Hugh de Plessets, whose daughter Christiana he had married. The king immediately ordered a grant of one thousand pounds towards the ransom of this young man, in acknowledgment of the services both of him and his father. Nicholas and his son attended the king in his great expedition for the conquest of Wales.

Nicholas de Segrave.

William de Audley.

William de Audley, or Aldithely, held large possessions in Cheshire, Staffordshire and the marches of Wales. In this county, he is said, by some writers, to have held Markeaton and Mackworth near Derby: manors, that were certainly in the possession of Thomas de Tuchet, who lived in the reign of Edward II. and espoused Joan, one of the co-heiresses of Nicholas lord Audley, of Haleigh, who was nephew of the William here mentioned. This William de Audley accompanied the king in the Welsh expedition and was slain in one of the earliest engagements.

Ralph de Pipard.

Ralph de Pipard had, in the first year of the reign of Edward I. been found heir to Robert Fitz Ralph, of Thurvaston in the county of Derby. He was personally in the Welsh expedition, and was subsequently appointed governor of Bolsover and Hareston castles in this county.

Edward I. enters Wales.

These were the principal persons of baronial rank, at that period connected with Derbyshire, who attended king Edward in the subjugation of Wales. On the entrance of that monarch with his army into the northern provinces of the principality, Llewellyn retired to the passes of mount Snowdon, and took up a position so excellently defended by nature, that Edward found it impracticable to attack him. Relying upon the numbers and intrepidity of his troops, the English monarch invested the mountain, established military posts at the most convenient situations, and leaving the army under the command of Roger Mortimer, retired to the castle of Rhudlan in Flintshire, where he awaited the result. A bridge of boats had been constructed across the Menai, opposite to Bangor, by the English, in order to maintain a communication with the isle of Anglesea, and the command of this bridge was entrusted to lord Latimer with a body of English forces, and to Lucas de Thoni, who commanded some troops from Gascony: these did not altogether exceed three hundred men. In the

middle of a dark night, the bridge was attacked by the Welsh, who had been stationed for that purpose in the woods near Bangor. The conflict was severe, and the storminess of the night assisted the assailants. The forces appointed for the defence of the bridge were either slain or drowned, and the Welsh, remaining masters of the communication, were joined by a large re-enforcement of their countrymen from Anglesea, with whom they marched through passes of extreme difficulty, conveying provisions from the plains to the mountainous station of Llewellyn. This may be said to have been an unfortunate victory for the Cambrian prince, who, surrounded by his bards, heard it celebrated as a presage of the complete overthrow of the English invaders of his dominions. He assembled his men, and rushing precipitately down the sides of the mountain, attacked the camp of Mortimer. The English forces were speedily assembled, and although the combat was long and sometimes doubtful, the Welsh were at length completely defeated and Llewellyn was slain on the field of battle. With this prince terminated the independence which this remnant of the ancient Britons had for so many centuries maintained. Every province submitted to the arms of Edward, and Wales was declared, by a parliament assembled for that express purpose, to be indissolubly united to the crown of England. During the next year, Edward held his court at the castle of Caernarvon, with his queen, who was at that time pregnant. On her delivery, he convened a meeting of the Welsh nobility and clergy; and, presenting to them the new-born infant, he proclaimed the child prince of Wales, and called him Edward of Caernarvon.

Conflict on the Menai.

Llewellyn's descent from Snowdon.

Birth of Edward of Caernarvon.

Wales having been thus subdued, and the disorders produced by the unstable government of the two former reigns remedied by just and vigorous enactments, Edward passed over to his continental dominions, having left the regency of his kingdom in the hands of his cousin, the younger Edmund, earl of Cornwall, assisted by the earl of Pembroke, to which title the family of De Valence had succeeded. The king remained in France until the August of 1289. Soon after his return he entered upon that investigation of the rights of the aspirants to the crown of Scotland, which, with whatever views he may have commenced it, was undoubtedly the source of a resolute purpose to unite to the crown of England the realm of Scotland, in the same manner as he had already made Wales a portion of this kingdom.

Edward visits the Continent.

Margaret, an infant princess of Norway, was the last descendant of a long line of Scottish sovereigns, and, consequently, in her centred the rights of the crown of that kingdom. Edward was her great-uncle, his sister, Margaret, having been married to Alexander, king of Scotland, who had by her two sons and a daughter, also named Margaret, who married Eric, king of Norway, in the year 1281. The two sons of Alexander died early in life, and his daughter also died soon after the birth of her infant. Edward immediately formed the plan of uniting the two great divisions of the island under one crown, and persuaded the estates of Scotland to agree to the marriage of the infant Margaret of Norway with his son Edward, who was then scarcely five years old. On the strength of this agreement, he proceeded so far as to appoint the bishop of Durham as one of the regents

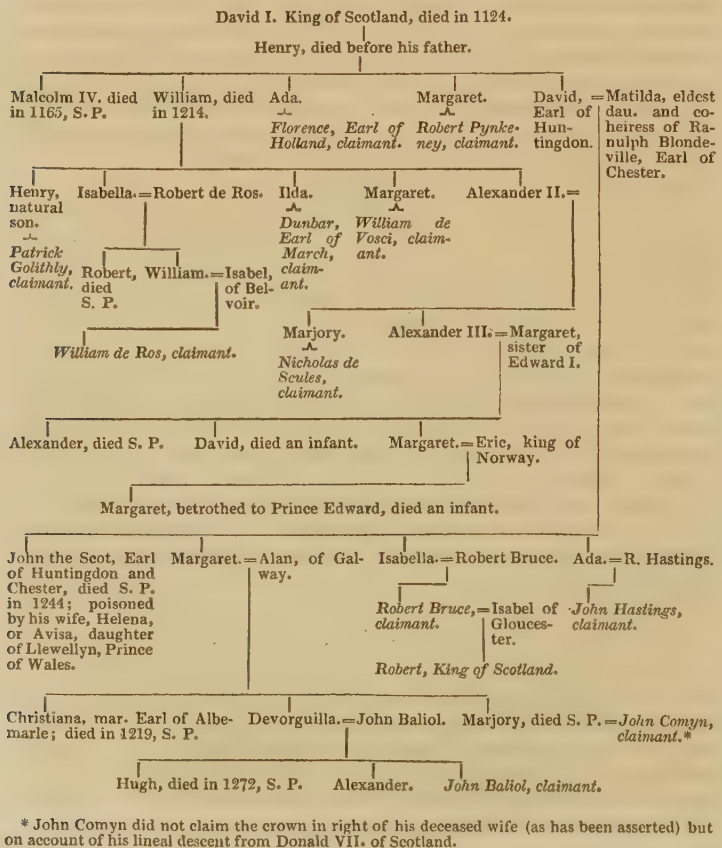
Affairs of Scotland.

CHAP. 10. Affairs of Scotland.

who were to rule that realm in the name of the two infants; but unfortunately for his plan, Margaret of Norway died at the Orkney islands, in her passage from the land of her birth to that of which she was the acknowledged queen.

Claimants of the crown of Scotland.

When this intelligence arrived, numerous claimants to the crown of Scotland appeared: among whom John Baliol and Robert Bruce were the most distinguished. One of the most illustrious of the ancestors of Bruce has been noticed in our account of the battle of the Standard. Baliol was closely connected with the county of Derby: he had the custody of the Peak, with the honour of Peverel: he possessed the manors of Lenton, Hollington and Cresswell, and had three times, during the reign of Henry III. been sheriff of the counties of Derby and Nottingham. Among the other claimants, we may also consider John Hastings, one of the ancestors of the marquess of Hastings, and William de Ros, an illustrious maternal ancestor of the dukes of Rutland, entitled to our notice on this occasion; and the relative value of their claims will be seen in the following genealogical tablet.


David I. King of Scotland, died in 1124.
Henry, died before his father.
Malcolm IV. died in 1165, S. P.
William, died in 1214.
Ada.
Florence, Earl of Holland, claimant.
Margaret.
Robert Pynkeney, claimant.
David, Earl of Huntingdon.
Matilda, eldest dau. and coheiress of Ranulph Blondeville, Earl of Chester.
Henry, natural son.
Patrick Golithly, claimant.
Isabella.=Robert de Ros.
Robert, died S. P.
William.=Isabel, of Belvoir.
William de Ros, claimant.
Ilda.
Dunbar, Earl of March, claimant.
Margaret.
William de Vosci, claimant.
Alexander II.=
Marjory.
Nicholas de Scules, claimant.
Alexander III.=Margaret, sister of Edward I.
Alexander, died S. P.
David, died an infant.
Margaret.=Eric, king of Norway.
Margaret, betrothed to Prince Edward, died an infant.
John the Scot, Earl of Huntingdon and Chester, died S. P. in 1244; poisoned by his wife, Helena, or Avisa, daughter of Llewellyn, Prince of Wales.
Margaret.=Alan, of Galway.
Isabella.=Robert Bruce.
Robert Bruce, claimant.
Isabel of Gloucester.
Robert, King of Scotland.
Ada.=R. Hastings.
John Hastings, claimant.
Christiana, mar. Earl of Albemarle; died in 1219, S. P.
Devorguilla.=John Baliol.
Marjory, died S. P.=John Comyn, claimant.*
Hugh, died in 1272, S. P.
Alexander.
John Baliol, claimant.

* John Comyn did not claim the crown in right of his deceased wife (as has been asserted) but on account of his lineal descent from Donald VII. of Scotland.

In Scotland itself the nation was divided between the rights of Baliol and Bruce, and a civil war appeared inevitable when Edward offered himself as mediator. A meeting of the states of Scotland, in consequence of his invitation and appointment, took place at Norham on the 10th of May, 1291. At this assembly the whole number of claimants were present, and were prevailed upon to acknowledge that Scotland was a fief of the English crown, and to swear fealty to him as their liege lord. The kingdom of Scotland was likewise delivered absolutely into the hands of Edward, to hold in trust for the claimants, and he accordingly sent his own governors with troops to take possession of the royal castles. When we reflect that all the principal claimants were English barons, this submission to the sovereign they were accustomed to obey does not imply that abject earnestness to secure the favour of the royal umpire of which some historians have accused them. CHAP. 10.

Scotland a fief of the Crown of England.

The sovereignty of Scotland having been thus confided to Edward, he deferred the examination of the several claims of the candidates to the following August, when the states were again to meet at Berwick. The decision, after a deliberation of several months, was in favour of Baliol, and he renewed his oath of fealty to the king of England, who immediately took measures to secure to him the tranquil possession of the throne of Scotland. The Scottish historians, and among the rest Dr. Robertson, accuse Baliol of base obsequiousness to the views of the English monarch, but we think with much injustice. The family of Baliol had been remarkable for their loyalty during the baronial confederacies, and this John Baliol is not to be condemned for not suddenly refusing to show his respect for a prince in whose dominions he then held territories little inferior in actual revenue to the kingdom he was appointed to govern. Baliol was not insensible to the duties of his new station, but his talents were not equal to the extraordinary circumstances in which he was placed. When he perceived that Edward had endeavoured to make him the tool of his own sovereignty over Scotland, he made a struggle for independence, and in that struggle he was crushed without mercy.

Baliol declared king of Scotland.

It cannot be denied, that as soon as Baliol was seated upon the throne of Scotland, Edward lost no real opportunities, and devised many fictitious pretences, to make him understand that he was rather his viceroy in that realm than the sovereign of that country in his own right. He listened to every complaint that was brought against Baliol by those whom that unhappy monarch had chanced to offend in the exercise of his legitimate authority; and for trifling circumstances connected with Baliol's estates in England, which would have remained unnoticed had he continued an English baron, the king of Scotland was summoned to answer before an English parliament. The Scots were irritated at this treatment of their king, and it may be easily believed that Edward would have more securely established the supremacy which he had been at so much pains to get acknowledged, had he not so ostensibly and so insultingly exercised it. Some disputes having arisen between France and England, Baliol sent ambassadors privately to Philip, king of France, requesting his aid, and proposing a marriage between his son and the niece of the French king. This ne-

Edward irritates the Scots.

CHAP. 10. gociation came to the knowledge of Edward, who instantly marched with a large army into Scotland; took Berwick by assault and laid siege to Dunbar. The Scottish nation, which had at first reluctantly obeyed a sovereign whom they had regarded as the lieutenant of the king of England, no sooner saw him actively engaged in asserting the independence of the Scottish crown, than they flocked voluntarily to his standard. Some French troops had also arrived to his assistance, and Baliol, at the head of an army, more numerous than disciplined, appeared in the plains before Dunbar, to dispute with his former sovereign and general, the independence of the throne he had received at his hands. It is reported that the agitation of Baliol on this occasion was extreme, and that he would even then have entered into negociation with the man whom he had revered as a sovereign and loved as a friend; and whose former kindnesses were still stronger in his memory, than the many humiliations with which Edward had so amply repaid himself for those kindnesses. But the Scots had nothing to remember but insults, and their chieftains were eager for the battle. Both armies fought with intrepidity, but the military skill was entirely on the side of the English king, whose vigilance was ever the companion of his valour. The Scottish army was completely defeated, with the loss of little less than twenty thousand men. The consequence of this victory was, to Edward, the taking of Dunbar, Roxborough, Edinborough, Sterling and Perth. At Kincarden, Baliol appeared before his conqueror with a white wand instead of a sceptre in his hand, and surrendered to him the kingdom of Scotland, after having held it for little more than three years. Baliol was sent to England, and for some time confined in the tower of London. After some years he was permitted to retire to Oxford, where his father, who was strongly attached to the literature of that period, had laid the foundation of the college, which is still known by his name. There, after his short but severe experience of the troubles of a crown, the dethroned king of Scotland, with his mother Devorguilla, who still survived, occupied themselves in fulfilling the intentions of the founder. While the college was erecting they heard lectures in a hired mansion, which stood near Canditch, and finding that too small, they purchased a mansion, since called St. Mary's hall, where they established a society, intended at first to be temporary, but which was afterwards chartered both by the princess and her son. As for Edward, he, in the meantime, made himself master of Scotland. The crown and sceptre were removed to Westminster, and with them the famous stone of Scone, which had been used since the reign of Keneth II. as the inauguration throne of the kings of that country.

Edward invades Scotland.

Battle of Dunbar.

Baliol in England.

Affairs in Guienne.

Whilst Edward was thus engaged in seizing the crown of Scotland, without either conciliating or completely subjugating the people of that country to his government, some circumstances of a very different nature called his attention to France. The seamen of England and of France bore an enmity towards each other, and for some time carried on a sort of piratical warfare without the interference of the government of either country. This continued until the French merchants, having lost some valuable cargoes, laid their complaints before king Philip, who instantly summoned Edward, as a peer of France, to appear at the French court in

person, and answer to the charges brought against him. The king of England was then engaged in repeatedly summoning, with much less authority and on much weaker pretences, the unhappy Baliol to attend him as his vassal, and he was unwilling to show that obedience to his own liege lord, which he so pertinaciously exacted. He sent as his ambassadors, his brother Edmund, earl of Lancaster, accompanied by Henry de Lacy and Hugh de Vere. Philip practised with these ambassadors a similar deception which Edward had practised towards Scotland. He employed his queen and the queen dowager to persuade these ambassadors to surrender six of the principal castles in Guienne, to hold conditionally until the affair of the merchants was settled. The ambassadors yielded to the persuasions of the royal ladies; and the castles being garrisoned by French troops, Philip and his council of peers declared that Edward, by not appearing in person on the summons of his liege lord, had justly incurred the confiscation of the province of Guienne. CHAP. 10. Affairs in Guienne.

Edward was marching into Scotland when he heard of the conduct of the French monarch. A fleet of one hundred and twenty-five ships were, nevertheless, got ready without delay, in which prince Edmund of Lancaster, with his friend Henry de Lacy, again visited France at the head of a body of well appointed troops, in order to recover by arms what they had lost by negociation. On their disembarkation they laid siege to Bordeaux, but being unable to take it, and losing many of their troops as well by sickness as in the continual combats they were obliged to maintain with the superior army under the command of the count de Valois, they threw themselves into Bayonne. There depressed in spirit at perceiving, that by his own misfortune both in negociation and in war, his brother's dominion in France was reduced to the town of Bayonne, in which he was cooped up with his few remaining troops, he fell sick with vexation and died in the spring of the year 1296.*—This earl of Lancaster and Derby possessed extensive estates in this county, having had conferred upon him the castles and manors of Robert de Ferrers. He was surnamed *Crouchback*, on account of the elevation of his shoulders. In his youth he was invested with the title of king of Sicily, by a sanctified ring sent him by Edmund of Lancaster.

* The old versifier *Hardinge* asserts that the earl of Lancaster and many others were slain in a skirmish near Bayonne, of which those historians who content themselves with plain prose make no mention. As the lines are curious, the reader may not be displeased at finding them inserted in this note.

"But erle Edmond, the kynges brother dere,
With twenty and sixe baners, proud and stout,
The fift day of June was accompted clere,
Of Christ his date a thousand yere all out,
Two hundred, four score and sixteen, no doubt:
At Bayon fought with the French menne certain
Wher he in the feld that daye like a knight was slain."

"So was Sir William Valence erle of Pembroke then,
Sir John Richmond, and many other baron,
Sir John Saynct John, right a full manly manne:
Th' Englishe hoste felly ther was bore doune,
By a bushement, laied by colucion,
That brake on theim, sore fighting in the feld,
Out of a wode, in whiche that day were beld."

CHAP. 10. the pope, but this investure was only a pretence of his holiness to draw large sums of money from this country. He was also made earl of Chester, and had the lands of Simon de Montfort with the honour of Leicester granted him, on the death of that nobleman in the battle of Evesham. He accompanied his brother to the Holy Land, and on his return he had a grant from the crown of the manors of Wirksworth and Ashbourn, with the wapentake of Wirksworth in fee, to hold by the service of two knights' fees. His first wife was Avelina, daughter and heiress of William, earl of Albemarle, and, in her own right, countess of Holderness. By her he had no offspring. His second wife was Blanch, of Artois, granddaughter to Louis VIII. of France. By her he had three sons and a daughter. This princess, his widow, had for her dowry, these manors in Derbyshire: Repton, Duffield with Southwood, Holbrook, Heage, Beaurepaire (Belper) Alderwasley, Ideridgehay, Biggin and Holland: also, Hartington and lands in Bonsall, Brassington, Spondon, Pentrich and Newbold, with the advowson of the church of Duffield. She had manors also in the counties of Northampton, Stafford and Leicester.

Edmund of Lancaster.

Edward forms a confederacy against France.

Edward, irritated at the deception of the French king, at the loss of Guienne, and grieved at the death of his brother, had no sooner dethroned Baliol and garrisoned the castles of Scotland with troops of his own, than he set about forming a continental alliance, by means of which he hoped to be able to subvert the French monarchy. The earl of Flanders and the emperor of Germany were the heads of a league, which included almost all the petty independent princes whose territories skirted the banks of the Rhine, and who then, as their successors have since, hired out their subjects for the service of more wealthy potentates than themselves. Edward wanted men, and the people of England submitted to severe taxation in order to supply him with the means of employing these foreigners in his quarrel. But this money, though voted by a parliament assembled almost for that express purpose, in the November of 1297, at St. Edmundsbury, was not easily levied. The clergy refused their quota, and pleaded the interdiction of pope Boniface VIII. by which they were forbidden to pay taxes to secular princes without the consent of the Holy See. Edward instantly commanded the seizure of all their lay fees, which he said could not be under any such interdict, and by their sale levied thrice as much as the clergy would have had to pay had they submitted to the order of parliament. But this treatment of the clergy did not intimidate the barons, whom he called upon to meet him at Salisbury. They refused to leave the kingdom. His object was to head the foreign troops in Flanders, and to send his English forces into Guienne. Humphrey de Bohun, with a loud voice called upon the lord treasurer and the barons of the exchequer to levy, at their peril, the tax of the eighth penny, voted by the recent parliament. He was joined in this declaration by Hugh Bigot, earl of Norfolk, and marshal of England, and, among many others, by John de Ferrers, son of the last earl of Derby of that name. They proceeded so far as to invite the Londoners to stand by them, and confident that the people were generally inclined to their cause, they openly proclaimed, that as far as they were bound by military tenure they and their tenants would

The Barons refuse to pay taxes.

accompany the king wherever he commanded in person, but that they would not be sent on a distant expedition without him. Edward remonstrated with the earl marshal, and being irritated at his firmness, he swore that he would make him go. To which the earl replied that he should not. "By the eternal God," exclaimed Edward, in a great rage, "you shall march or be hanged."—"By the eternal God," replied Norfolk, "I will neither march nor be hanged;" and immediately quitted the royal presence. CHAP. 10.

A confederation of the barons conveyed to the mind of Edward more terror than it could have been sensible of from any other apprehension. He altered his plan. He summoned those who held of the crown to accompany him in person to Flanders, and published a proclamation, in which he promised, that if any thing in the urgency of his affairs had been done contrary to the Great Charter it should be remedied, throwing himself entirely upon the affections of his people to support him in those great undertakings which concerned the honour of the English nation. The effect of such a proclamation proved that Edward was aware of the policy of occasional concession. The people and the barons thronged to his standard, and had the war been attended by some successes in the outset it might have become popular. But Edward's allies deceived him. The German princes had received his money, but their troops were either ill-appointed or fell far short of the number for which he had agreed, and the earl of Flanders found his domains divided by factious parties, of which one, consisting chiefly of the mercantile class, bore for its symbol the *fleur-de-lis*, and declared itself in the cause of France. In vain the king of England, on his arrival, visited Bruges and Ghent, and personally offered to those trading towns the most important privileges relative to their commerce with England; he could not reconcile them to their sovereign prince, who had forfeited their respect by imprisoning their magistrates and violating their municipal rights.

Edward confirms the Great Charter.

Edward deceived by his Allies.

He was in this situation when he received intelligence that the Scots had risen in arms, and that under the conduct of an intrepid leader, a spirit of independence had displayed itself, which set his sovereign authority at defiance. "At that critical period," says Dr. Robertson, "arose Sir William Wallace, a hero, to whom the fond admiration of his countrymen hath ascribed many fabulous deeds of prowess, though his real valour as well as integrity and wisdom, are such as need not the heightening of fiction. He, almost single, ventured to take up arms in defence of the kingdom, and his boldness revived the spirit of his countrymen."

Renewed troubles in Scotland.

Wallace.

Alarmed at the intelligence that Wallace had driven the English garrisons out of numerous castles, and that his forces were increasing daily by the junction of the Scottish nobles, Edward concluded a hasty truce with the French king, and returned to England. Instantly he called a parliament, and as a sure step to obtain all the aid of which he stood in need, he voluntarily confirmed the Great Charter. The war for the subjugation of Scotland was popular in itself, and this behaviour of the king secured him all he wanted. An army was raised with extraordinary celerity, and he marched into Scotland.

Edward concludes a truce with France.

CHAP. 10.

The Earl of Surrey defeated by Wallace.

John, earl of Warren and Surrey, had, during the absence of the king, been constituted general of all the forces north of the Trent. About the same time he was made governor of the castle of Hope in the north of Derbyshire. On the breaking out of the insurrection in Scotland under Wallace, he marched to Stirling and there encountered that patriotic leader, by whom he was completely defeated. To remedy this disaster, he levied troops in the northern counties, which he entrusted to the command of his sister's son, the young earl of Northumberland. These were almost the only English forces in Scotland at the time of the return of the king of England from Flanders.

Edward prepares to enter Scotland.

Edward, on his march to the north, had appointed the city of York as the place at which the northern barons of England were to assemble, sufficiently provided with horses and arms for the meditated expedition. A council was also held in that city, at which that extraordinary prelate,

Anthony Bec, Bishop of Durham.

Anthony Bec, bishop of Durham, was present. He was brother of Walter, lord of Eresby in Lincolnshire, but possessed extensive estates of his own, among which was the manor of Pleasley in Derbyshire. Though an ecclesiastic he attended Edward I. to the Holy Land, in military array, and was distinguished as well for his valour as his prudence. On his return to England he was appointed constable of the tower of London. As a churchman he delighted in the ostentatious ceremony, and, what may be termed the magnificent piety of the age in which he lived. The sanctification of William, the deceased archbishop of York, having been declared by an edict of the Holy See, he was at the whole charge of the splendid and imposing rites, which, on that occasion, were solemnized in the cathedral of York, in the presence of the king and queen, attended by a numerous train of nobility and dignified ecclesiastics. At the close of this ceremony, Bec was consecrated bishop of Durham, and shortly afterwards attended Edward to Scotland, in complete armour, at the head of five hundred horse and a thousand foot, raised either from his own estates or from the manors of his diocess: he had also in his pay a numerous body of soldiers from Wales and Ireland. He had been employed in investigating the claims of the candidates for the crown of Scotland, on account of the superiority of his legal knowledge, and he had been sent on embassies to France and Germany, because he could readily answer the sovereigns of those countries in their own tongue. He united in his own person the ease and politeness of the courtier, the lofty carriage of the soldier, and the pious dignity of the ecclesiastic.

Thomas, Earl of Lancaster.

Among those who were at the council at York and the subsequent expedition into Scotland, we may particularly mention, as being connected with this county, Thomas, earl of Lancaster and Derby, and in his retinue we find the name of Robert de Ferrers, grandson of Robert, the last earl Ferrers of Derby, and that of William de Ferrers of Groby.—Edmund, lord Stafford, and also Thomas de Furnival, who, as we have already seen, held the manors of Eyam and Stoney Middleton in Derbyshire.* He

* These, and other possessions of the family of de Furnival, are said to have been part of the manors which William the Conqueror conferred on his friend and trusty officer de Busli, who held eight manors in Derbyshire and eighty-six in the adjoining county of Nottingham, besides

was then entering his six-and-thirtieth year, had just been appointed sheriff of the counties of Derby and Nottingham, and had been named captain general of the militia of those counties: he attended at York with the troops under his command. He was a warrior of elegant presence and superior prowess, and stood high in the favour of his sovereign. "How he carried himself," says Holland, in his interesting history of the manor of Worksop, "when with the king in the Scottish wars, may be inferred from the following extract from the Siege of Caerlaverock, an ancient heraldic poem, enumerating the barons, knights and gentlemen, who attended Edward the First to that siege, anno 1300. CHAP. 10. De Furnival.

"Avec eus fa achiminez
Ci beau Thomas de Fournival,
Ki kant sur le cheval
Ne sembloit home ke sommeille.
Six merlos e bende vermeille
Portoit en la baniere blanche."

Of which lines we may venture to give this free translation:

With them marched along that way,
Thomas de Furnival, bold and gay:
Who, when upon his steed he leapt,
Did not resemble a man who slept.
Six martlets, with red bend between,
Were on his silvery banner seen.

Robert D'Arcy attended Edward in these Scottish wars, and so did his nephew Philip, the son of Norman lord D'Arcy, of whom we have already spoken. Robert subsequently attached himself to the followers of Bruce, and for that offence, his lands, chiefly in Lincolnshire, were confiscated. Philip was frequently sheriff of the counties of Derby and Nottingham. D'Arcy.

John de Wake attended the king in Flanders, and was much employed in the wars in Scotland, where he continued subsequently as one of the commissioners under the archbishop of York, who had the care of the garrisons and marches of that kingdom. His father, Baldwin de Wake, had been deeply engaged on the part of the confederated barons, in the reign of Henry III. and was one of those who after the battle of Evesham joined Robert de Ferrers, earl of Derby, in his fatal insurrection. He was present at the battle of Chesterfield; which town was a manor of his own, inherited from his great uncle William de Briwere. De Wake.

John de Segrave, already high in favour with his sovereign for his military skill and bravery, was in all the Scottish wars, and was present at the great victory obtained by the English at Falkirk. He was afterwards made governor of Berwick on Tweed, and warden of Scotland; but, one De Segrave.

possessions in other counties. They are, however, not named among his manors in the General Survey. De Busli's property seems to have passed very speedily into other hands, and his immediate descendants are traced, with some doubt as to his actual successor, only to the third generation, when Idonea, the wife of Robert de Vipont, was the sole heiress of Richard de Busli, of Tickhill castle in Yorkshire. William de Lovetot was, as early as the reign of Henry I. in possession of many of de Busli's manors in Nottinghamshire, and the great granddaughter of this William de Lovetot, the heiress of the family possessions, was bestowed, by Richard I. on Gerard de Furnival, the son of a Norman knight, who accompanied that monarch to the Holy Land, and was at the siege of Acre.

CHAP. 10. evening, riding out at the head of a small party belonging to the garrison
De Segrave. of Berwick, he fell into an ambuscade of the Scots, and after a severe conflict he was wounded and made prisoner. We find him, however, in the next year, accompanying the king at the celebrated siege of Caerlaverock, and on the triumphant return of Edward to England, he remained in Scotland as the king's lieutenant.

De Bardolph. Hugh de Bardolph had succeeded to the estates of his father, William de Bardolph, whom we have already noticed among those who were summoned to the expedition against Wales. This Hugh was taken prisoner by the French at the siege of Cusance, and was afterwards employed by Edward in his Scottish wars, during which he was slain.

Grey de Wilton. Lord Reginald Grey de Wilton held Shirland and Stretton in Derbyshire: he was a man in whose wisdom Edward placed great confidence, and, when the king, on his expedition to Flanders, left the realm under the regency of the young prince, he especially nominated lord Reginald Grey as one of the prince's assistant counsellors. He was aged at the period of the Scottish wars, but he was nevertheless present with the army, while his son John, who was then forty years old, displayed such activity and courage, that he was honoured with several marks of royal favour.—

Grey de Codnor. Lord Grey of Codnor was also personally engaged in the Scottish wars, in the retinue of prince Edward, and afterwards in that of Andomar de Valence, earl of Pembroke.

De Frescheville. Ralph de Frescheville attended Edward I. in the Scottish wars. Many of the manors in Derbyshire, bestowed by William the Conqueror on Hubert Fitz-Ralph and on Ascoit de Musard, had descended to the Frescheville family. Among the possessions of this Ralph were Crich and Scarcliff, together with Staveley, Woodthorpe and Whitwell. His father, Ancar, was of the party of the confederated barons, and was taken prisoner by the king's troops at Northampton. His lands were accordingly seized, and his manor of Crich was, for a time, bestowed upon Bryan of Brompton; but the whole of these possessions were afterwards redeemed by composition.

Ralph de Cromwell. Ralph de Cromwell had succeeded John de Cromwell in his manors within Derbyshire and other counties. He was summoned to attend the king in his Scottish wars. While in Scotland, he brought a charge of treason against Nicholas de Segrave, the brother of John de Segrave, whom we have made mention of above. A strong animosity seems to have arisen between the two families, both of whom had estates in this county. Nicho-

Nicholas de Segrave. las de Segrave is styled by the historian Matthew of Westminster, "*Unus de prætantioribus militibus de Regno.*" "One of the most excellent soldiers of the realm." On this charge, Nicholas was desirous of vindicating his innocence, by single combat. As this mode of trial was refused by the king, the irritated soldier threatened the accuser that he would take an opportunity of compelling him to a private duel, or seize some opportunity of avenging himself. Cromwell, alarmed for his personal safety, fled to France, where Nicholas de Segrave, in despite of the royal interdict, pursued him. Edward was so offended at his conduct, that he caused him to be seized and tried by a military court. His brother John made in-

terest for him with the barons, appointed not so much to try as to sentence him; and after three days' deliberation, the court declared, that he being, at the time of his offence, specially employed in the king's wars, had by desertion of his duty merited death, and that all his property should be confiscated. They added, however, that, in regard of his noble descent, and in the consideration that he had left his post to assert his loyalty by vindicating himself from a charge against his honour, they could not but conceive that his crime was within the compass of his sovereign's pardon. Edward, with severity of aspect, replied—"It is always in my power to extend mercy as I please. Who, I demand of you, hath ever submitted to my clemency and suffered for it? But, if the honour of one of you is to outweigh his duty, I can never be secure of the service of any. Let your sentence, without any mention of mercy (which is mine to exercise as I will, not yours even to understand) be recorded in writing, and it shall stand for law." Nicholas was instantly committed to close confinement. His brother and the other barons were struck with terror, as well at the manner as the determination of the king, but Edward seemed to be aware that this opportunity of enforcing discipline was not to be lost, and he for some time remained obdurate to the entreaties of some of the most powerful leaders in his army. At length thirty of the principal barons, including John de Segrave and his son Stephen, the brother and the nephew of the offender, presented themselves before the king, girt with their swords and attended by the bearers of their banners. As soon as the king approached them they knelt down and drew their swords, while their banners were bowed down towards the ground; and thus, in the attitude of supplication, they offered to be bound, body and goods, for the future strict military obedience of Nicholas de Segrave. The king listened to their request, and addressing to them a few words on the dangers resulting to his great enterprise from a want of confidence in those entrusted with the performance of particular duties, he, with great dignity, raised them severally according to the rank of each, with extended arms, and then pronounced, that Nicholas de Segrave was pardoned and restored to his honours and possessions. —This Nicholas de Segrave rose greatly in the king's favour: he had a high command in the army against Robert Bruce, was made governor of Northampton castle, and marshal of England.

CHAP. 10.

Nicholas de Segrave.

In the Scottish wars of Edward I. other names are mentioned, connected with the county of Derby, among which we find Ralph de Pipard; Almaric de St. Amand, who held Catton upon Trent; William de Tuchet; Robert de Willoughby, the nephew of Anthony Bec, bishop of Durham: with three persons of baronial rank, all of the name of Nicholas de Meinell.

Other Barons of Derbyshire.

The battle of Falkirk was fought on the 22nd of July, 1298. The Scottish troops were led on by Wallace, and Edward commanded the English in person. The conflict was obstinate and sanguinary. Wallace was compelled to relinquish the field and to seek refuge among mountains and morasses. Scotland was reduced to temporary obedience, and the English victor returned to his own capital, and entered upon a negociation with the king of France for the restoration of Guienne. Before this negociation was concluded, the Scots had again revolted: the inhabitants of

Battle of Falkirk.

CHAP. 10 Revolt of the Scots.

the towns, and the population in every district, attacked the English garrisons on the same day, and Scotland appeared to have suddenly recovered her freedom. Edward a third time entered the borders of that unfortunate kingdom, and the brave, but rude assertors of her independence, were driven to the bogs and fastnesses of her mountainous districts. From those unassailable positions they frequently descended, and uniting themselves under the command of Wallace, they made the English sensible of the instability of their dominion. John de Segrave, who then commanded in Scotland, formed the design of reducing the country for miles around the retreats of these bands of hardy warriors into one vast desolate waste, for the purpose of compelling them to submission. He divided his army into three bodies, which severally were encountered by the Scots and defeated. Enraged at this circumstance Edward again entered Scotland, and again, by his presence and the immense forces that attended him through every district, he awed the country into submission; Wallace alone ventured to appear upon the flank and rear of the English army, frequently intercepting the foraging parties and sometimes attacking the soldiers in their march through the narrow defiles of the mountains. Annoyed in his triumphant progress by the continual assaults of the Scottish hero and his brave followers, Edward offered a reward for his apprehension, and he was betrayed by one of his friends. He was almost immediately executed, and his quarters hung up in four of the principal towns of Scotland, where those who gazed upon them were not less excited to avenge the heroic patriot than they were awed into submission by these mangled testimonies of his fate.

John de Segrave.

Edward I. again enters Scotland.

Robert de Bruce

Robert de Bruce, son of the rival of Baliol, had, during the pursuit of the Scots, after the battle of Falkirk, overtaken a band of desperate soldiers, who, as they retreated, fought around the person of Sir William Wallace. The brave patriot having drawn his pursuer into a secluded glen, which was intersected by a small river, demanded a parley, to which Bruce readily agreed, supposing that Wallace was about to yield; but when he called upon the hero to submit, he was startled at the solemn reproach with which Wallace firmly but respectfully remonstrated, that he, the legitimate heir to the Scottish throne, should be engaged in aiding the king of England to overturn the independence of Scotland. Bruce, it is said, burst into tears, and continued long to meditate on the words of Wallace. On the barbarous execution of that leader, Bruce appeared among the independent spirited barons of Scotland and was proclaimed king. He was speedily surrounded by troops devoted to his cause, and Edward once more saw his conquest snatched out of his grasp. The earl of Pembroke was sent against the new king of Scotland, whilst an immense army under Edward himself was assembled at Carlisle. Bruce was repeatedly defeated: many of his adherents were seized, three of his brothers were put to death on the scaffold, and his queen imprisoned.

proclaimed king of Scotland;

defeated.

Edward again invades Scotland.

Edward being again master of Scotland, resolved to take measures that might securely unite the crowns of the two kingdoms. He was, however, again deceived in his expectations, for Bruce, during the ensuing winter, which was particularly rigid, assembled his dispersed forces, defeated the earl of Pembroke, and compelled the earl of Gloucester to retire to the

castle of Ayr, while he made himself master of many strong places in the west of Scotland. The king of England summoned all the vassals of the crown, without distinction, to meet him at Carlisle with their military tenants: the spring and part of the summer of 1307 were occupied in these preparations, by which he determined to reduce the whole of Scotland to a state of vassallage, and to bestow the lands on his followers as William the Conqueror had divided England among his Normans. He left Carlisle in the first week of July, his army having preceded him across the Scottish borders. On arriving at the small town of Burgh on the Sands, he was obliged to stop there on account of a dysentery, with which he had been seized; and the violence of that calamity increasing rapidly, he expired on the 7th of that month. On his death-bed he pressed the hand of Andomar de Valence, earl of Pembroke, and besought him to preserve his son from his dissolute companions, and ever to oppose the return of his son's favourite, Piers Gaveston, to England: particularly to urge him to the subjugation of Scotland, and firmly to adhere to him in all his fortunes.

Edward's preparations for the complete reduction of Scotland.

Death of Edward I.

Thus terminated the life of Edward I. a prince of an active and prudent mind, who would probably have united the whole of this island into one realm, had not his attention been so repeatedly drawn from his great object to his possessions in France, that he had no time to regulate the government of Scotland and conciliate the Scots to his dominion, before he was obliged to leave his new conquest in the hands of his lieutenants, who irritated the inhabitants by their severity. But our business is not to draw the characters of kings or to point out the leading points of their policy. Edward died shortly after the close of the thirteenth century, during which period this county had suffered severely by the wars of John and his son Henry III. with the confederated barons. The castles of the Peak, Bolsover and Hareston, were entrusted to such barons as adhered to the king, and were the scenes of severe conflicts. The Ferrers' family had their castles at Duffield and Tutbury nearly destroyed by the king's troops, and towards the latter end of the civil war between Henry III. and the barons, Derbyshire was for some time the theatre of dreadful devastation; for so greatly had Robert de Ferrers provoked the vengeance of the court by his intemperate insurrection, which was terminated by the battle of Chesterfield, that his extensive manors were given up to the ravages of a merciless foreign soldiery. Whatever trade there was at such a period, it was subjected to serious interruptions; but from the anxiety expressed in an old writing relative to the tolls on merchandise at Swarkstone bridge, and at the fords at Bredon and Ashbourn, we may conclude that traffic of some importance was carried on with the neighbouring counties.—The town of Derby had been, during the preceding century, governed by an officer appointed by the earls of Chester and the earls Ferrers, called Provost, or *Prepositus*, who received the duties: one-third of which was enjoyed by the earl and the other two-thirds by the crown. Early in the thirteenth century a Charter was granted to Derby, empowering the burgesses to elect the Provost.—About the close of the same century, the rent of land in the neighbourhood of Derby was from 6*d.* to 2*s.* per annum, per acre; and the rent of a mill was from £2. to £3. 10*s.* per annum. We may conclude,

Character of Edward I.

Derbyshire during the thirteenth century.

CHAP. 10. that the town was improving in the condition of its inhabitants, as we find assessments made for paving its streets.*

Derbyshire during the thirteenth century.

* The following circumstances, noted in the Annals of Burton, are curious enough to merit a place in a note.

"In the same year (1253) on the 14th Kal. Oct. (18th Sept.) the sky being clear about the close of the evening, at the manor of *Ailwaldeston* (Alvaston) near Derby, Sir Thomas Hanselin, very aged, lord of that manor, and Galfred his son, and many others, as well of the village as of their own family, standing by and beholding this matter, as also a certain freeman, by name Nicholas, of Findern, who also saw the occurrence and related it to us. Suddenly in a wide dark cloud there appeared a large, bright star, like the radiant sun, and near it two small red stars, like sparkling candles, which instantly leaped fiercely towards the great star, and (as we may say) were attacking it, rushing upon it, and waging a desperate war with it; so that it seemed to those who were witnesses of this sight, that fiery particles descended from them. This combat lasted until the close of the evening, so that those who beheld it, ignorant of what it might portend, retired to their homes, struck with terror and astonishment."

"1255. In this same year, about the time of the Ascension of the Lord, there was taken in the waters of the Trent, near Donington castle, a fish, eight feet in length, called a sturgeon. The old people of those parts affirmed, that a similar fish was taken in the same place, the very year before king John was crowned."

"On the 3rd ides (13th) July, a hail-storm happened in the valley of the Trent, between the bridge of *Wychenofre* (Wichnor) and *Rependonam* (Repton) astonishing beyond measure, so that those who witnessed it, affirmed that nothing like it had taken place in their time. An astonishing whirlwind followed the hail, overwhelming and carrying away the land, with buildings and the corn in the fields. The destruction of the hay was universal throughout the vale of the Trent by inundations of the waters, such as had not been known during a long series of years."

In the same Annals, under the same year *(vide Annales Mon. Burt. 363)* it is stated that a certain prior of this monastery of Burton, by name of John de Stretton, on account of his having been born at Stretton; a man of great authority and eminent for his learning, by the express license of the abbots, who at that period governed the monastery, had during many years, made additions to the bridge at Egginton over the Dove, and kindly kept it in repair. After his decease, the inhabitants of Egginton, unwilling to acknowledge this favour, and pretending total ignorance, asserted and obstinately insisted that it was the duty of the abbey of Burton to keep that bridge in repair; thus aiming at converting a favour and benevolence into a custom. On this account the abbot Laurentius, who at that time was at the head of the monastery, obtained, through the intervention of his friend, Henry de Mertenton, an ecclesiastic of the court, royal letters to the earls of Stafford and Derby, commanding them to institute an enquiry into this matter. An inquisition was accordingly instituted, and the committee of enquiry appointed by the earl of Derby consisted of "Stephen, the son of Burgh, of Alvaston; Henry de Chambreis, of Barwardcote; William de Searsdale; Peter, of Thurleston; Richard, of Aston; Henry, son of Peter, of Bolton; Richard, son of Ormond, of Burnaston; Henry de la Chambre, of Twyford; Robert de Henovre; William de Lehges; Henry, his brother, and Walter de Wilne."—It was determined by the committees of enquiry in the two counties of Stafford and Derby, that there existed no duty either by custom or tenure for the repair of the bridge over the Dove, which is on the confines of the aforesaid counties,

CHAPTER XI.

Historical incidents connected with Derbyshire, continued from the death of Edward I.

Edward II.

EDWARD II. began his reign in a manner that at once lost him all the regard which the barons, out of respect to his father, might have been inclined to manifest towards him. In a few days after his accession to the throne, he recalled his favourite Piers de Gaveston, for whom he had conceived an almost unaccountable affection. On him he bestowed the earldom of Cornwall, the sovereignty of the Isle of Man, the High Peak in Derbyshire, with numerous other of the most valuable manors, then in the gift of the crown; giving him, at the same time, the hand of Margaret of Gloucester, his own niece, who was sister and co-heiress of Gilbert de Clare, the son of the great earl of Gloucester.

Piers de Gaveston.

Piers de Gaveston was the son of a knight of Gascony, who, by his attachment to the cause of the king of England, had gained the favour of the late king's brother, Edmund, earl of Lancaster and Derby; and on the death of that prince, at Bourdeaux, he was entrusted with confidential letters to the king. He came accompanied by his son, then a youth, not many years older than prince Edward; so lively in his manners, and so elegant and interesting in his person, that there seemed nothing improper in his being made the page and attendant of the heir of the English throne, in whose studies and sports he was permitted to share. There was an artful obsequiousness in young Gaveston which the brilliancy of his exterior, particularly in early life, concealed. He soon gained an ascendency over the prince, whose sports he speedily seemed to direct, and whose pleasures he afterwards completely controlled. His wit was at once terse and severe; and by his talent in ridicule he kept the sons of the noble barons from rivalling him in the favour of the future sovereign; and, finding that his power increased in proportion as the companions and pursuits of the youthful prince were of the lowest description, he led him to indulge in the vilest courses of ribaldry and debauchery. In the military exercises of that period he excelled, and at the tilt and tournament he suffered none to disarm or unhorse him but prince Edward. Vain of his countenance and figure, it is needless to say he was splendid in his apparel; and he wanted not address nor even valour, to warrant, in some degree, an elevation among the frequenters of the court; but he had no solid accomplishments, and when he aimed at directing the counsels and the public actions of a weak and debased monarch, he paved the way for the destruction of himself and his sovereign.

Marriage of the King.

Within six months after the death of his father, the young king sailed over to France, to conclude his marriage with Isabella, the daughter of Philip the Fair, to whom he had been betrothed, and during his absence, Gaveston was the regent and guardian of the realm, by his appointment;

CHAP. 11. and at the coronation, which followed immediately upon the return of the king with his queen, Gaveston was appointed to carry in the procession the crown of St. Edward, which was to be placed on the sovereign's head. This honour had never before been allowed to any person not of the blood royal, and the young earl of Lancaster and Derby, the king's first cousin, had challenged this office as his right, but he was taunted by Gaveston, who, mimicing some peculiarity in the royal earl's gait, said he would carry it like a stage player: a sarcasm that was never forgiven. With levity like this, equalled only by the pride with which he disgusted the powerful military companions of the late monarch, he was accustomed to designate the brave earl of Pembroke as the Jew, because he was tall, with a sallow, war-worn aspect, and dark eyes: while Guy de Beauchamp, earl of Warwick, who had likewise been one of the constant companions in arms of Edward I. and was one of those who received the last injunctions of the dying monarch, the insolent favourite nick-named "the black dog of Ardenne forest," on account of the swarthiness of his complexion.—The queen, a woman of lofty spirit, was also irritated as well at the behaviour of her husband towards one whom he loaded with wealth even to the impoverishment of his private coffers, and could not disguise her indignant feeling, but wrote to the king, her father, that the wretch Gaveston not only treated her contemptuously, but estranged her husband from her bed.

Favours to Gaveston, and his proud conduct.

Admonition and death of the Earl of Lincoln.

Lacy, earl of Lincoln, whom we have already mentioned as holding among his extensive lands and manors, the lordship of Risley in the county of Derby, was then lying on the couch of death. He had accompanied the late king in all his wars, and had shared his confidence on all occasions. He was one of those whom the royal warrior had called around him to hear his dying injunctions, when he breathed his last on the sands of Cumberland. Prince Thomas, the young earl of Lancaster and Derby, had married Alicia, the only daughter, and, indeed, the only surviving child of the earl of Lincoln. The noble earl, sensible that his end was approaching, and aware of the calamities which the government of the abject king and his vile favourite was bringing upon the nation, sent for the prince, his son-in-law, and thus addressed him. "Honour God above all things; but—seest thou, my son, that the church of England, heretofore honourable and free, is now enslaved by Romish oppressions, and by the king's unjust exactions? seest thou the common people, impoverished by tributes and taxes, and from the condition of freemen, reduced to a servitude? seest thou the nobility, formerly venerable through Christendom, vilified by aliens in their own native country? I therefore charge thee, in the name of Christ, to stand up like a man, for the honour of God, and his church, and for the redemption of thy country, associating thyself to that valiant, noble and prudent person, Guy, earl of Warwick, when it shall be proper to discourse of the public affairs of the kingdom; for he is judicious in counsel and mature in judgment. Fear not thy opposers who contest against thee in the truth: and, if thou pursuest this my advice, thou shalt gain eternal honour."

Earl of Warwick.

Guy de Beauchamp, earl of Warwick, to the guidance of whose counsels the dying earl thus recommended the attention of his royal son-in-law,

had already formed a confederacy against the profligate authority of the king's favourite; at the head of which was Valence, earl of Pembroke, the archbishop of Canterbury and many of the most distinguished earls and barons of the realm. No sooner had Warwick introduced the young prince, who had instantly visited him, to the assembled nobles, than he was received by them with great joy, and declared general of the army they had determined to raise. He was soon at the head of a large body of forces, and with the expectation of surprising the king at York, who was with his favourite indulging in the festivities of that city, he marched thither; but Edward having heard of their approach, and being informed that the first of their demands was the delivery of Piers Gaveston into their hands, he fled before them. Having placed his favourite in the castle of Scarborough, the king withdrew into Warwickshire, where he expected the support of the royalists. He was closely pursued by the earl of Lancaster with the main body of the confederate army, while the earls of Pembroke and Warren carried on the siege of Scarborough. The castle, though well situate and strongly fortified, was ill provided with provisions, and it may very easily be imagined that the luxurious favourite and his attendants were not of that description of men who are best calculated to endure the deprivations of a protracted siege. In a few days they offered to capitulate, and Gaveston, in delivering himself up to his enemies, obtained a promise that he should speak with the king and be tried by his peers. In conformity to this promise, the earl of Pembroke proceeded to escort his prisoner to Wallingford, but on arriving at Deddington in Oxfordshire, he placed Gaveston under guard for the night, and Guy de Beauchamp, earl of Warwick, who was extremely enraged that any terms should have been granted to a man who had been the cause of so much dishonour and vexation to the whole nation, came with a party of armed men and carried him off to the castle of Warwick. On the arrival of the earls of Lancaster, Hereford and Arundel, a consultation was held, and warm disputes ensued whether he should be conducted to the king or put immediately to death. In the midst of this discussion, "*sobrius quidam*," says an old historian, which we may translate, "*a cool-minded individual* of the party," observed, "that after having been at so much trouble and expense to catch this Gaveston, it would be great folly to risk the chance of his getting again under the king's protection: and that it was much better to put Gaveston to death than to continue a civil war." To this intimation the rest of the assembly acceded, and Gaveston was taken to an eminence called Blacklow hill, about a mile north-east of Warwick, where his head was struck off by a Welsh soldier, one of the attendants of the earl of Arundel.

CHAP. 11.

Confederacy of Barons joined by the Earl of Lancaster.

Capture and death of Gaveston.

Such an execution, unwarranted by any previous trial, and in direct violation of the capitulation entered into at Scarborough, cannot be vindicated upon any grounds, but it was not in the power of the king to manifest his indignation and resentment. The army of the barons had marched to London and Edward fled to Canterbury, where he prevailed upon the Archbishop, together with the earl of Gloucester, son of his sister Joanna, to mediate between him and the confederates. Some terms of accommodation were agreed upon, but confidence was not restored, for, says the old

Flight of the King.

CHAP. II. historian Walsingham, there continued an ill-concealed enmity between the king and the barons; the earls of Warwick and Lancaster being more particularly the objects of the king's hatred. The former of these two barons died a short time after these events, and it was generally believed that poison had been given him.

Enmity of the King and Barons.

Wars in Scotland.

The war carried on by Edward II. in Scotland, was a series of dishonourable defeats. The total discomfiture of an immense army, commanded by the king himself, at Bannockburn, re-established the independence of the Scottish crown. Edward fled from the field of battle, closely pursued by the victorious Scots, across the borders of the two kingdoms, and seemed not to consider himself out of danger until he arrived at the city of York.

Edward driven out of Scotland.

But while Edward was thus driven out of Scotland, he could have little expectation of repose amid the discontents of the people of England, where famine of the severest description, attended by disease, was adding its horrors to the distress and disorder which already prevailed throughout the kingdom. Walsingham assures us, that the most loathsome animals were eaten, that even children were stolen to serve as food, and that men were assassinated for the same purpose. The price of a quarter of wheat rose to 20*s*. which, according to the relative value of money at that time and this, would be little less than £20. of our present currency.

Famine.

It is difficult to imagine the infatuation of a monarch, who in the midst of these disgraces and internal calamities, expended a large sum of money, in a magnificent celebration of the obsequies of his deceased favourite, whose body he caused to be removed, with solemn pomp, from Oxford to King's Langley, near St. Albans, where Edward had founded the church of the friar preachers, for the express purpose of praying for the soul of Gaveston. Nor was he contented with showing these posthumous attentions to the memory of a man hated by the nation, but sought every occasion of displaying his exasperation against those who had been instrumental in causing Gaveston's death. The earl of Lancaster and Derby was, in particular, the object of his vengeance, and he could stoop to any means of annoyance, however despicable, that might afford some vent to the irritation of his mind. In the spring of the year 1317, the king, without any process of law, gave his own warrant to a knight of the train of the earl of Warren, to seize the wife of the earl of Lancaster, under the pretence that she had been previously betrothed to him, that he had enjoyed all the freedoms of a husband, and that she was, by the custom of that period, legally his wife. This knight was named Sir Richard de St. Martin: he was very low in stature, lame and hunchbacked. Being possessed of the king's warrant, he went to the residence of the countess in Dorsetshire, attended by a large retinue, and carried her off in great state to the castle of Ryegate in Surrey, which belonged to his patron the earl of Warren. The barons, and indeed the people at large, were astonished at the infliction of so extraordinary an insult as this, by the authority of the king, upon a prince of the blood, high in the esteem of the nation. Expressions of indignation were loud and general, nor were they diminished by the expedient to which the king resorted of having the deposition of the countess herself taken, who was reported to have acknowledged a criminal intimacy

Obsequies of Gaveston.

The Countess of Lancaster and Derby seized.

with this deformed knight, and a betrothment to him, before she became the wife of the royal earl at the instance of her father. To this deposition were added charges of adultery alleged by the countess against her husband, the earl, whom she was made to accuse of keeping several mistresses and of treating her with cruelty. The public would believe nothing against a prince whom they honoured for his valour and patriotism and loved for his extensive charities and universal benevolence. Edward was, however, not deterred from his purpose of injuring his more popular and public spirited cousin, and being countenanced by his younger brother, Edmund of Woodstock, whom he had created earl of Kent, and by the earl of Warren, who had deserted the party of the royal earl of Lancaster, he countenanced the claims of the decrepit knight to the earldoms of Lincoln and Salisbury, in the right of the countess, his pretended wife.

Deposition of the Countess.

While Edward was thus increasing the enmity of those on whose support his own power depended, he had taken into his intimacy a new favourite named Hugh de Spencer, who with his father ruled for some time the king and the national counsels, with more arrogance than even Piers de Gaveston had done. Hugh de Spencer, the elder, was a very aged man, and, during the last reign, had won the estimation of his warlike sovereign by his conduct in numerous battles. His son, Hugh de Spencer, the younger, rose by obsequiousness into the favour of the king: his avarice and ambition were insatiable, and at every accession of power and possessions, his insolence towards the barons of the kingdom increased.

Hugh de Spencer.

A confederacy of the barons was the consequence. They met at Sherborne, and placed themselves again under the authority of Thomas, earl of Lancaster. Having speedily raised an army, they marched, with banners displayed, to St. Albans, proclaiming their purpose to redress the grievances of the realm. From the town of St. Albans, where they remained three days, they sent the bishops of Ely, Hereford and Chichester to the king, calling upon him to banish the Spencers beyond the realm. Edward agreed to refer the matter to a parliament, which was soon assembled at Westminster, and in which the two favourites were sentenced to banishment for life. But this measure, though it allayed the discontent of the nation, and enabled the barons to dismiss their military tenants, served not as an admonition to the infatuated sovereign, but inflamed him with the desire of vengeance. Under pretence of chastising the Scots, who invaded the borders and laid waste the northern counties, he got together a large army, and recalled to his intimacy the younger Spencer, on whom he heaped more honours and possessions than he had previously done.

Confederacy of the Barons.

In the meantime, the party of the confederate barons had been weakened through jealousy and disaffection, and the earl of Lancaster was unable to collect any considerable body of troops to act against the king, who was in great strength in the heart of the kingdom. With those adherents whom he could hastily draw together, he marched first to Gloucester and thence to Burton upon Trent, and so on to his castle of Tutbury, where he intended to remain until he could raise troops from among his military tenants in Derbyshire and the neighbouring counties. For this purpose he

The Earl of Lancaster deserted by his party.

CHAP. II. Sends Robert de Holand to raise troops.

sent one of his attendants, Robert de Holand,* whom he had taken out of his buttery, and preferred to the dignity of knighthood, with an income in land (chiefly in Derbyshire) of two thousand marks a year, into Lancashire and the northern parts of Derbyshire, to bring up the levies in those parts. While the earl of Lancaster remained at Tutbury, the earls of Hereford, Mowbray and de Lisle advanced through Coventry and Lichfield, closely pursued by the king and the two Spencers. In order to favour the passage of his associates and oppose their pursuers, the earl sent troops from the castle of Tutbury to seize the bridge at Burton; but the re-enforcements which Sir Robert de Holand had engaged to levy, and on which the royal earl greatly depended, not having arrived, he was unable to take measures for defending the ford at Walton.—After a short but severe conflict at Burton, the king and the two Spencers withdrew to Walton, where they passed the Trent, with the intention of seizing and laying waste the possessions which the earl of Lancaster so extensively held in Derbyshire. The devastation was carried on with all the spirit of malicious revenge, and the earl and his associates finding themselves too inferior to meet the king in a field of battle, withdrew, after a few skirmishes, from the castle of Tutbury and retreated towards the north.†

The King takes Tutbury.

The king and the Spencers immediately entered Tutbury castle, but the cupidity of the favourites was disappointed of the booty they expected to have found there, the earl having sent forward his treasures to his castle at Pontefract, where he intended to fix his head quarters. A commission was, however, drawn up by the younger Spencer, and signed by the king at Tutbury, March 11th, 1321, commanding Edmund, Earl of Kent, and John de Warren, earl of Surrey, to pursue and arrest the earl of Lancaster and his confederates.

The Earl of Lancaster arrives at Pontefract.

When the patriotic prince arrived at Pontefract he held a consultation with the barons who accompanied him, in the cloisters of the Black Friars in that town, and they were of opinion that he should proceed onward to the castle of Dunstanburgh, a castle of his own in Northumberland, but he declared he would not place himself in a position in which he might be liable to the accusation of holding a correspondence with the Scots, the

* Dugdale (Vol. II. p. 73.) says that the rise and advancement of this Robert de Holand was by being secretary to Thomas, earl of Lancaster and Derby, who obtained for him a grant from the crown, in fee, of the manors of Melbourn, Newton, Osmaston, Swarkstone, Chellaston, Normanton and Wyveleston, in this county.

† About the middle of June, 1831, an immense quantity of silver coins, of ancient date, was found completely buried in the sands and alluvia of the river Dove, near the castle of Tutbury. The particulars of this discovery will be given in another part of this work. There is great probability that this treasure (as a writer in the Derby Mercury intimates) was concealed by the earl of Lancaster on the occasion above narrated; and we fully agree with that writer in the following reasons given by him for his very judicious surmise.

1st. The magnitude of the treasure, which could only belong to a powerful baron.

2nd. That no coin after the period of Edward II. has been found, therefore the treasure was most probably hidden during that reign.

3rd. That as the earl alone might be privy to the concealment, and as his own friends were debarred access to him after his imprisonment, and as he might be unwilling to divulge the secret to his enemies; so it would die with him, or if divulged, the exact spot of concealment might never have been discovered.

4th. It may be inferred, as few or none of the groats, or half groats were found, and only pennies, that the money was intended for the payment of the troops, and might have been concealed during his very short abode at Tutbury; and flying from an enemy he might not think it prudent to carry it with him.

enemies of his country. Some of the few barons who continued among his remaining adherents, were extremely irritated at his determination: they saw that without assistance from Scotland they must yield to the king and his favourites, and as they were sure that no mercy would be shown them, they hoped that by reaching a place of security on the borders, they should at least be afforded opportunities of escaping out of the kingdom. The brave and patriotic earl, however, strongly resisted their persuasions, until, at length, Sir Roger de Clifford drew his dagger, and backed by others, swore that he would stab the earl to the heart if he would not accompany them northward. Thus compelled to yield to their resolves, with less than seven hundred men, he continued his march from Pontefract, and with the king's troops close upon his rear, he reached Boroughbridge, where he sustained, with considerable advantage, the attack of the earl of Warren, while Humphrey de Bohun, earl of Hereford, the firmest of his adherents, attempted to make himself master of the bridge, which was defended by lord Latimer, with some troops from York, and by Sir Andrew de Harcla, of Carlisle, with the militia from Cumberland. The conflict on the bridge was desperate and sanguinary, and the earl of Hereford had nearly taken possession of the pass, when a soldier, who had concealed himself under one of the arches of the bridge, leapt up and thrust him through the body with his spear. His followers, dismayed by this occurrence, gave way and fell back upon the main body commanded by the earl of Lancaster. The battle continued, but on very unequal terms. Lord Latimer and the earl of Surrey speedily surrounded the small remnant of the royal earl's adherents, who were, in a very short time, either slain or taken prisoners. The earl of Lancaster, Roger de Clifford, John de Mowbray, Warren de Lisle and several others, were taken back to Pontefract, where the king and the two Spencers had arrived. On their journey they were treated with every indignity. The earl of Lancaster was, in particular, insulted by the sycophants that surrounded the king: a paper crown was put upon his head, and he was saluted by the title of king Arthur, it having been insinuated, that under the pretence of taking arms to redress the grievances of the people, he had aspired at the throne. In the castle of Pontefract, which so lately had been his own, he found arrayed against him, on each side of Edward and the two Spencers, many of the barons who had been among his earliest confederates, and even instigators in an undertaking, the object of which was the just enforcement of the laws. It gave him a severe pang, when he beheld among his judges, Valence, earl of Pembroke, who had urged him, in the former insurrection against Piers de Gaveston, the king's former favourite, to support by his rank and power the cause of the barons and of the people, against the tyranny and avarice of the king and his ministers. The tribunal, before which he stood, was not long in pronouncing his fate. He was sentenced to be drawn, hanged and quartered; but the king, in consideration of his being so nearly related to himself, consented that he should be beheaded, and that the other practices attending the execution of a person condemned as a traitor should be omitted. He suffered on the 23rd of March, 1322; and many of his followers perished also on the scaffold and the gibbet.—Few men of his

CHAP. 11.

Marches northward.

Conflict at Boroughbridge.

Taken prisoner.

Execution.

CHAP. II. Execution.

elevated rank were, at that period, so loved and reverenced by the people. His grave was thronged by multitudes, who believed that miracles were wrought by his remains, and the hill where he suffered was the constant resort of thousands, who could not be kept away, until their devotion to his memory was in some degree satisfied by the erection of a church on the spot where he died. In the next reign he was actually canonized, and his picture being set up in St. Paul's cathedral in London, it was regarded as an object of adoration by the common people, who always mentioned him by the appellation of the good earl of Lancaster.

Robert de Holand.

Robert de Holand, who, we already have stated, was sent by the earl of Lancaster to raise troops, and to conduct them to the castle of Tutbury, seems to have been generally suspected of having betrayed the noble earl, his benefactor and patron. The particulars of his treachery are not related by the historians of that period, but we shall find that a strong belief in it entertained by the public was ultimately the occasion of his death. On receiving intelligence of the defeat and capture of the earl of Lancaster and his friends at Boroughbridge, he surrendered himself to the king at Derby. He was sent prisoner to Dover castle.

Roger de Mortimer.

The overthrow of the earl of Lancaster's party and the death of that excellent prince, left the avidity and tyranny of the two Spencers without controul. Still they did not think their vengeance to be complete while Roger Mortimer was alive, who had been one of the most active partisans in the confederacy against them. He was in their power, and they procured his condemnation, but the queen found means so effectually to intercede in his favour, that his execution was continually delayed. The people, disgusted at the great sacrifice of life on the scaffold, which had followed the battle of Boroughbridge, and irritated at the death of a prince so generally beloved by them, were kept in a state of excitation by the emissaries of the queen, who everywhere declaimed against the recent severities, and the Spencers were afraid to crush one whom they knew to be their most inveterate enemy, and whom they held in their grasp. Sir Stephen Segrave was constable of the tower at that time; a brave soldier, who was not likely to betray a trust confided to him, however he might commiserate the condition of his prisoner. Segrave had a soldier from his own manor of Alspath in Warwickshire, named Gerard, who was little troubled with those scruples that are so intimately connected with military duties. To Gerard of Alspath the custody of Sir Roger de Mortimer had been confided, and through his means a correspondence was carried on between Mortimer and the queen, and a plot was laid to facilitate the escape of the former from the tower and his passage into France. On the evening appointed for this purpose, Mortimer invited the governor to sup with him. The old warrior loved to indulge in a social glass, and his memory was stored with many of the occurrences of the Scots wars, which he was fond of relating; and particularly his own capture at the fatal battle of Bannockburn, where he, at the head of a company of his brave tenantry (many of whom were from Bretby, Rosleston and his other manors in Derbyshire) had actually driven a division of the Scottish army from the field, when, being deserted by those who ought to have supported them, they were sur-

rounded by the enemy and made prisoners. The wine was potent, and in some that was particularly relished by the governor there had been infused a soporific drug. He fell fast asleep, and Mortimer prepared to effect his escape. Some persons concerned in the plot were of opinion that they should avail themselves of this opportunity to make themselves masters of the tower, which would encourage an immediate insurrection of the Londoners: but Mortimer receiving a private intimation from the queen that one of the Spencers, with a body of men, was hastening to the tower, he privately made his escape by means of a rope supplied him by Gerard. It is asserted that he was afterwards concealed in the queen's chamber for several days, and at last sailed for France in a French vessel that was moored in the river Thames. Several of Mortimer's friends were seized by the Spencers, and Gerard de Alspath was hanged on the spot. The governor Segrave was reprimanded and sent to Guienne. CHAP. 11. Mortimer escapes.

Queen Isabella soon found a pretence to follow Mortimer to France. The Spencers seconded her intentions, for the younger of them believed that his influence over the king would be complete in her absence, and therefore when it was proposed that she should repair to the court of her brother, Charles the Fair, of France, in order to accommodate certain differences that existed between the two courts, the Spencers persuaded the king to give his consent to her mission. The Queen follows him to France.

Among those who at the particular desire of the queen were appointed to accompany her, as her council of embassy, to the court of Paris, was Henry de Beaumont, a foreigner, advanced in years, who appears to have been very nearly related to Eleanor of Castile, the first wife of Edward I. and mother of the reigning monarch. This Henry de Beaumont had been in the Scottish wars, where he was greatly distinguished for his bravery, and on the marriage of Edward II. with Isabella of France, he was in the train of the English king, to whom he was so intimately allied, that in sundry grants he is termed, *consanguineus regis*. He was for many years joined in commission with the earl of Angus to guard the southern districts of Scotland, and was present at the unfortunate battle of Bannockburn. So inveterate an enmity had he conceived against the Scots, that during a discussion in the privy council, relative to a truce with that nation, he, perceiving how the king and his chief advisers were inclined, kept silent. Edward, anxious probably to have his approbation of a measure which he was conscious would not be popular, called upon him to give his advice. "My advice," replied De Beaumont, in a loud and offensive tone, "will not be followed, and therefore I will not give it." The king, irritated at his conduct, commanded him to quit the council chamber. De Beaumont rose, and as he went out, exclaimed, that "seeing what disgraceful counsels were prevalent there, he had rather be gone than stay." The two Spencers were present, and the guard was instantly called to arrest him for his contumelious behaviour, but Henry de Percy and Ralph de Neville started forward and became his sureties. Habituated from his youth to regard the subjugation of Scotland as the most important object of English policy, he saw with grief that the money so repeatedly raised under the pretence of carrying on the war, was lavished upon unworthy favourites. Henry de Beaumont.

CHAP. II. Henry de Beaumont.

He had also a personal motive for his anxiety on this matter. He had married Alicia, the niece and heiress of the earl of Buchan, constable of Scotland, and, in right of his wife, he had assumed the title and claimed the estates of the deceased earl. Edward's loss of that supremacy which his father had acquired over the Scottish realm, had occasioned the confiscation of these and other possessions claimed under similar titles by several of the barons of the English court; and this was the cause of much of that discontent which was ever ready to break forth against him and his advisers.

Plot against the Spencers.

Previous to the departure of the queen, a plot for the overthrow of the Spencers had been extensively espoused by the barons, but the actual dethronement of the king was probably contemplated by few. Among the conspirators were the king's brothers, Edmund, earl of Kent, and Thomas de Brotherton, earl of Norfolk and high marshal of the realm: prince Henry, the brother of the earl of Lancaster and Derby, was also actively engaged in promoting the objects of the confederacy. When the queen arrived at Paris, it became the determination of the conspirators to separate the young prince Edward, at that time a spirited youth not thirteen years of age, from his father, and to get him into the hands of Isabella and her adherents. For this purpose, the king of France was urged by his sister first to insist upon the homage of Edward for the province of Guienne, and afterwards to suffer himself to be persuaded by the representations of De Beaumont and the other ambassadors, to accept the personal homage of the young prince instead of that of Edward himself. The two Spencers might have perceived the advantage they placed in the hands of their enemies by entrusting them with the person of the heir apparent to the crown, but as they were in possession of the king himself, in whose name they carried on their system of plunder and tyranny, and as the homage could not not be refused without the certainty of a war for Guienne itself, they yielded to the expedient of sending the prince to his mother.

Arrival of Prince Edward in Paris.

Immediately upon the arrival of young Edward in Paris, the English, who had either sought refuge in that country or had been banished by the Spencers from their own, hastened to pay their respects to him and the queen. Roger de Mortimer had waited for this opportunity to join her, and became the most intimate of her counsellors. By his advice a negociation was opened with the earl of Hainault for a body of troops to accompany herself and the confederates to England, and in order to secure an object of this importance, she did not hesitate to affiance the young prince, her son, with Philippa, the earl of Hainault's daughter. Having satisfactorily concluded this business, she left Paris, with a numerous train of the disaffected English, and proceeding to Hainault, she ratified the treaty concluded with the earl, and having solemnly betrothed the youthful couple, she embarked at Dort in the vessels which the earl had provided, and in which there were about three thousand troops under the command of the earl's brother. She landed in the mouth of the Orewell, on the coast of Suffolk, on the 22nd of September, 1326, where she was received by Henry, earl of Lancaster and Derby, Valence, earl of Pembroke, and several powerful barons, together with the bishops of Hereford, Lincoln and Ely.

Affianced to Philippa of Hainault.

The Queen and Prince invade England.

The king and his two favourites were struck with terror when they heard of the landing of the queen and prince: they had no troops on whom they could depend, and the execrations of the excited people proved to them that all reliance on popular support would be vain. They remained a few days in the tower of London, and then issuing a proclamation, in which they offered a reward of a thousand pounds for the head of Mortimer, and called upon the people of England to drive the foreign invaders from their shores, they fled towards the borders of Wales. They were pursued by the queen and her son, whose army daily increased; and fearful of being seized by the people and delivered up to their pursuers, they resolved that the elder Spencer should be left in Bristol, and that the king and the younger Spencer should embark for Ireland. Probably they entertained some hope that the city of Bristol would resist the queen's forces for some days, but the people opened their gates and received them with shouts of joy. The aged Spencer, then in his ninetieth year, was dragged into the presence of prince Edward, who sat in the public hall, surrounded by powerful barons. The old man, who had been respected for his military talents, and who would have been venerable for his years, had he not rendered his very age the pandar to his son's ambition and avarice, was immediately condemned to be hung upon the ramparts of the city over against the sea coast, where (says Froissard) his body might have been seen by the king and Spencer the younger, then beating about in a small vessel on the channel of the ocean below. His body, according to some old writers, was suspended by two strong cords, in his armour, and when it had remained four days thus exposed, the flesh was cut away with knives and thrown to the dogs.

Flight of the King and the Spencers.

The elder Spencer taken and hanged.

The king, with Hugh de Spencer the younger, escaped the morning before the queen and the prince entered the city. They embarked in a small fishing boat, which lay behind the castle. The sea was extremely rough, and it was with difficulty they could prevail upon its owner to put to sea. Their intention was to cross the channel to Ireland, but the seaman declared that to be impossible. They then persuaded him to endeavour to steer for the small island of Lundy, where there was a castle, built upon a ridge of rocks, and esteemed to be impregnable. The winds were adverse to their intentions, and, after having been eleven days at sea, exposed to tempestuous weather and greatly distressed for provisions, they put into a small creek in Glamorganshire, and proceeded to the abbey of Neath. The king made himself known to the Welsh population, spake of his birth at Caernarvon, and called upon them to be loyal to their countryman and prince. The abbot and monks of Neath treated the fallen monarch with much compassion and respect, but some expressions being dropped that intimated to Hugh de Spencer that he was not equally welcome to their hospitality, he retired by night to Caerphilly castle, on the banks of the river Rumney, where he was received by the garrison, whom he induced to stand a siege against a body of the queen's adherents some months. It is probable that he was not personally known by either the defenders or the besiegers of the castle, for on its surrender he was permitted to take the benefit of the general terms of capitulation, when he again joined the king

The King escapes to Wales with the younger Spencer.

CHAP. II. at Neath abbey. After this occurrence a report got abroad that the king was concealed somewhere in Wales, and Henry of Lancaster, with a party of soldiers, accompanied by Henry de Beaumont, went in search of him. In consequence of a proclamation of two thousand pounds reward for such information that might lead to the apprehension of De Spencer the younger, intelligence was brought to De Beaumont which induced him to visit the abbey of Neath, where he found not only Hugh de Spencer and the king but several others, including the chancellor Baldoc and Simon of Reading. De Beaumont conveyed them to the castle of Llantrisan, where Henry of Lancaster awaited him. From Llantrisan the king and his companions were conveyed to Hereford, where Edward was persuaded to deliver up the great seal to his wife and son, and there Hugh de Spencer and Simon of Reading were hanged; the gibbet on which the former was executed was fifty feet high, and that on which the latter suffered, ten feet lower. Baldoc being in holy orders was sent under the charge of the bishop of Hereford to London, but on entering that city he was so severely treated by the populace that he died in prison of the injuries he had received.

Taken by de Beaumont.

Edward I. deposed.

The parliament, which met in January, 1327, deposed the king and nominated the young prince to the throne, by the title of Edward III. on whose accession the archbishop of Canterbury preached a sermon on these remarkable words—"The voice of the people is the voice of God." A coronation medal was also struck (if we may believe Rapin) on one side of which was the young king crowned, laying his sceptre on a heap of hearts, with this motto, "*populo dat jura volenti*"—"he gives laws to a willing people;" and, on the reverse, a hand held forth, to catch a crown falling from heaven, with these words, "*non rapit sed recipit*"—"he does not seize but receives." There can be no doubt that the queen's party endeavoured to give a popular colouring to the dethronement of her unhappy husband, and the nomination to the crown of a youth, in whose name she hoped that she and Mortimer would be able to exercise the sovereignty of the realm, but such legends as these (as bishop Nicholson has observed) possess a neatness of sentiment and expression of which those rude times were not susceptible.

The government of the kingdom was nominally entrusted to twelve bishops and peers, of whom Henry, earl of Lancaster and Derby, was appointed the head, but the queen and Mortimer controlled the conduct of this council and exercised the supreme authority. It is not our business to narrate the sufferings and cruel death of the deposed king. He had remained some time at Kenilworth castle, under the custody of the earl of Lancaster, but Mortimer became apprehensive that the royal earls of Norfolk, Kent and Lancaster, who had already shown some dissatisfaction at the unwarrantable transactions of himself and the queen, might make use of the fallen sovereign as an instrument to destroy his power, caused him to be removed to Berkeley castle, where was perpetrated, by the hirelings of the queen and her paramour, that nameless deed—

Death of Edward I.

"The shrieks of death, thro' Berkley's roofs that ring—
Shrieks of an agonizing king!"

Under such rulers as then swayed the affairs of the realm, the minority of the young king, notwithstanding the occasional symptoms of future greatness, which displayed themselves in the ardour of his character, could not fail of being disgraceful. A peace was made with Scotland, in which all that the politic Edward I. had done towards acquiring the sovereignty of the whole island, was annulled: the paramount right of the English crown was renounced, and a marriage was agreed upon between David, the son of Robert Bruce, and Joanna, the sister of the young king of England. The royal earls were disgusted at a measure which they considered as ignominious as it was subversive of the claims of those warlike barons who had acquired Scottish estates and titles during the wars. These earls, among whom the most active and intelligent was Henry of Lancaster and Derby, formed a confederacy, which included Henry de Beaumont and Thomas lord Wake of Chesterfield, both great claimants of lands in Scotland. CHAP. 11.

Disgraceful administration of Isabella and Mortimer.

Henry of Lancaster had always considered Robert de Holand as a traitor to his illustrious brother Thomas, who was beheaded at Pontefract. This Robert, on his surrender to Edward II. at Derby, was for a short time imprisoned in Dover castle, and on his liberation he retired to Henley, near Windsor, fearful of returning to his estates in the North. There he was discovered by Sir Thomas Wythers, one of the confidential attendants on the earl of Lancaster and Derby; and the earl, on hearing him mentioned, could not refrain from those violent expressions of indignation and hatred of a man whom he believed to be the cause of his brother's death, which might seem to Sir Thomas sufficient to warrant him in becoming the instrument of his master's wrath. Accordingly, he first excited the populace against this suspected traitor, so that the unfortunate man was obliged to quit his dwelling and seek refuge in the neighbouring forest. He was pursued by Sir Thomas and other adherents of the earl, and being seized, he was beheaded without any trial, and his head was sent to the earl of Lancaster, who was then residing at Waltham Cross. From this circumstance, the queen and Mortimer accused the earl of Lancaster of abetting the murder of Holand, and insinuated to the youthful king, that the royal princes were aspiring to the exercise of an authority dangerous to the crown. Intimations of this nature from his mother, continually repeated, excited the jealousy of Edward; and his uncle, Edmund of Woodstock, earl of Kent, who could not disguise his feelings with regard to the horrible fate of his brother, was pointed out as a person who raised extravagant reports in order to facilitate his own accession to the throne.

Robert de Holand seized and beheaded by the Earl of Lancaster.

Edmund of Woodstock, earl of Kent, the youngest son of Edward I. had always been strongly attached to his misguided and unfortunate brother; and when he joined the confederacy of the queen and Mortimer, he had no further design than that of displacing the Spencers, as the ministers who were abusing the confidence of their sovereign. The earl of Kent was connected with the county of Derby by his marriage with Margaret, the sister and co-heiress of Thomas lord Wake; who, on the death of her brother, came into possession of the town of Chesterfield, with the manors of Great Longstone, Sheldon, Wardlow, Holme, and Ashford with

Fate of Edmund, Earl of Kent.

CHAP. II. Edmund, Earl of Kent.

its hamlets. The earl, at the period of which we are speaking, was about twenty-seven years of age, and was more distinguished for the warmth and sincerity of his disposition, than for the spirit of intrigue and policy so usual in courts. He could not repress his sentiments with respect to the conduct of the queen, and as he openly encouraged the public discontent against the government, he was marked by Mortimer as a victim, necessary to be sacrificed to his personal safety. An extraordinary plot was devised for the purpose of drawing the earl into such designs against the state as might render his seizure and execution excusable in the eyes of the people. Some emissaries were sent to him, who told him, in pretended confidence, that his brother, Edward II. was still alive and closely confined in Corfe castle. A friar also, in whom he greatly confided, but who was a creature of Mortimer's, pretended to raise a spirit, in his presence; and, by some delusion, a spirit seemed to appear to him, and assure him that his brother not only lived, but would be restored to his throne, by his means. While his mind was agitated with this intelligence, he sent one of his confidants to Corfe castle to make enquiries, who returned with the information that he had actually seen the late king sitting at dinner in one of the chambers of the castle. The earl instantly went thither, and demanded of the governor, Sir John Daverill, to be introduced to the apartment of his brother. Sir John, who had received instructions how to act upon such an occasion, said, that his orders were strictly to prevent any person from visiting his prisoner; but, he readily yielded so far to the earnestness of the royal earl, as to receive a letter addressed to the supposed sovereign, in which Edmund assured his brother that he would endeavour to restore him to freedom and to his throne, and intimated that a plot was on foot for that purpose. The letter was speedily conveyed to the hands of Mortimer and the queen, who instantly laid it before the young king, and persuaded him, that his uncle was at the head of a conspiracy against the state. Edward was then not seventeen years of age, and having been continually under the tutelage of his mother, he had imbibed many of her political views, but he was with difficulty convinced that his uncle entertained any traitorous designs, and he reluctantly consented that the earl should be arrested and arraigned before the parliament then sitting at Winchester. Previous to his being cited before the peers, a confession was drawn from him, in an examination by Robert de Howel, the coroner of the household, in which it appeared that he had been acted upon chiefly by Sir Ingeram Berenger and Sir Robert de Taunton, who had promised him the aid of the archbishop of York and the bishop of London, and that he relied also upon the assistance of lord Zouch (who then, with other manors held Ilkeston in Derbyshire) and of Sir John Peche. He also stated, that on his visit to Paris, Henry lord Beaumont and Sir Thomas Rosselyne assured him that they would come to England to aid him.—On his impeachment, the next day, before the peers, he at once admitted this confession and his letter. No other evidence of his guilt was called for, and he was condemned. Having thus obtained the authority of the highest court in the realm for his death, Mortimer lost no time in effecting the execution of a man whom he dreaded, not so much for his talents as for

his uncompromising and fearless honesty; but it was not easy to obtain an executioner on this occasion. The official headsman absconded, and it was evening before any one could be found to supply his place, when a wretch was brought out of the Marshal's prison at Winchester, who, upon the promise of pardon for the crimes of which he had been convicted, severed the royal earl's head from his body. CHAP. 11. His execution.

As Edward III. approached his manhood, he became sensible that the government, in the hands of Mortimer and his mother, was detrimental to his own honour and interests. He began to perceive, that for the sake of a tranquillity which left them free to their abandoned indulgences, they had given up his claims to the crown of Scotland, and that, in the same manner, they were letting slip an opportunity in which he might assert his right to the crown of France. Charles IV. the brother of Isabella, died in 1328, without male issue; and a few months afterwards his widow was delivered of a daughter. Philip de Valois, cousin-german to Charles, immediately took possession of the throne, without any remonstrance on the part of the queen in behalf of the claims of her son. But Edward was not inclined to relinquish a supposed right of this important character, and he took care to protest privately before a council of state against the accession of Philip, while, in conformity to the wishes of his mother and Mortimer, he consented to obey the summons of the French crown to perform the ceremony of homage at Paris, for his hereditary provinces of Guienne and Poictou. Edward's claims to Scotland and France.

The ambitious spirit of the young king was unable to bear the humiliating policy of the queen and her adviser; and, on his return from France he particularly attended to those who pointed out to him the pride and tyranny of Mortimer, and accused that favourite of the murder of his father and of the unjust condemnation of his uncle. It was also insinuated to him that the queen was with child by Mortimer, and that it was the intention of her and her paramour to dethrone him as they had dethroned his father, and, by corrupting the parliament, to place their illegitimate offspring upon the throne. The criminality of the queen was notorious throughout the kingdom, and yet, it is said, that Edward was reluctant to admit the conviction of that shameless attachment which he was now old enough to have perceived. His eyes, however, were no sooner fully opened, than he resolved to seize the reins of power and to punish the culprits. Resolves to overthrow the favourite.

Mortimer, earl of March, surpassed any sovereign previously known in England in magnificence and the number of military retainers, by whom he was perpetually surrounded.* He had also contrived to bind many of the barons to his interests, and the most extravagant designs that have been imputed to him and the queen seem warranted by the power he had acquired and by the submission of the parliament to his authority. It was therefore necessary for the young king to proceed with circumspection and even with secresy against a subject who was actually, in his own realm, greater than himself. The principal confidant of Edward upon this occa-

* The earl of March possessed manors in almost every county: he held in this county the town of Ashbourn with its dependencies. Donington castle, on the bank of the Trent, belonged to him.

CHAP. 11. sion was Sir William Montacute, a brave and intelligent knight, not more than eight years older than himself; and by the advice of Sir William, the plot was communicated to Sir Humphrey and Sir William de Bohun, Sir Ralph de Stafford, Sir William de Clinton, Sir John de Neville, of Hornby, Sir William Eland and some others. The time for executing their purpose was determined to be that appointed for the meeting of parliament at Nottingham, which was the fifteenth day after the festival of St. Michael. The queen and Mortimer arrived in the town attended by a hundred and eighty knights, with their military tenants, and were lodged in the castle. The recent estrangement in the conduct of Edward had rendered his mother suspicious that he harboured some secret design: she remained secluded from the public view, and even caused the keys of the castle to be brought to her every evening, and at night she laid them under her pillow. On the opening of parliament, Mortimer could not fail to perceive that his authority in that assembly had lost much of its customary respect. The young king did not arrive until the third day after the meeting of parliament, when he entered the town privately, with a very small retinue. On the evening of the 20th of October he sent for the high sheriff of the counties of Nottingham and Derby, to whom he gave his precept, in which were recited the charges to be preferred against the earl of March, before the parliament then sitting, and in which the sheriff was commanded, in the name of the king, to issue his warrant for the apprehension of the said earl. The execution of this warrant was confided to Sir William Montacute and the confederates, who, accompanied by Edward himself, entered the castle at midnight by means of a subterraneous passage, with which Sir William Eland, who had some time been the governor, was well acquainted. This passage is an excavation of the rock on which the castle is built, and within it there is an ascent by means of steep steps to the keep: it still retains the appellation of Mortimer's hole. The confederates proceeded from the keep to the anti-room of the queen's bed chamber, where they found Mortimer already aroused, and surrounded by some of his most confidential knights. A severe conflict of some duration ensued, in which Sir William Montacute slew Sir Hugh de Turplington, steward of the queen's household, and Sir Richard de Monmouth. Mortimer then, with the bishop of Lincoln, the queen's almoner, who remained at his side, retreated into the chamber of Isabella, where Mortimer was seized by the young king himself, and two or three of the confederates, and dragged away, in spite of the exclamations of the queen, who cried out to her son, "*Bel fils, bel fils, ayez pitié du gentil Mortimer!*"—"Sweet son, sweet son, have pity on the gentle Mortimer!"

Parliament at Nottingham.

Mortimer seized.

The earl of March was carried out of the castle, through the subterranean passage, and immediately conducted, under a strong guard, to the tower of London. The king having now assumed the whole authority of his station, and knowing that in the parliament there were many of the adherents of Mortimer, he dissolved that assembly and appointed another to meet on the 25th of the next month at Westminster. In the meantime he caused many to be seized who had been subservient to the ambitious views of the earl of March, and among these his two sons, who were also

sent guarded to London. On the 23rd of October, royal precepts were issued commanding the seizure of all Mortimer's castles and manors, and three days afterwards a commission was granted to John de Kingston and others to take an inventory of all his treasure and jewels in Wales and the Marches; but the commissioners were particularly ordered to respect the wardrobe of Joan, the countess of March, and that of her daughters and servants, at her residence in Ludlow castle. CHAP. 11.

Edward, on the opening of the parliament he had summoned, addressed the members, and declared to them that he could no longer bear to see the country dishonoured and oppressed under the government of his mother and her favourite, who had at once oppressed the people and injured the interests of the crown: he had therefore, for the preservation of the state, anticipated the term prescribed by the law for the termination of his minority, and he looked to parliament for the confirmation of that authority which he had by circumstances been compelled to assume. Such confirmation was gladly voted, and on this the king hesitated no longer to resume all the grants of crown lands that had been made by the favourite, during his minority, together with the exorbitant dower of the queen, whom he confined at Castle Rising in Norfolk for the remainder of her life.

Mortimer condemned and executed.

The impeachment of Mortimer was immediately brought before the parliament: it consisted of several articles, in which he was charged with the deaths of Edward II. and the earl of Kent; with criminal intercourse with the queen mother, and with receiving a bribe of twenty thousand pounds from Scotland. His condemnation on each of these articles was voted with very little hesitation, and his sentence to be drawn and hanged directly followed. No evidence appears to have been heard, the notoriety of these crimes being considered sufficient to warrant the judgment of this parliamentary tribunal, and on the 29th of November he was drawn upon hurdles, from the tower, to the common place of execution, at the Elms near Smithfield. His body, after hanging naked on a gallows, two days and two nights, was granted to the Grey Friars, who buried it in their church on the south side of Smithfield.

Roger Mortimer, earl of March, was at the time of his death about forty-four years of age (queen Isabella was not much younger) and was the father of eleven children, by his wife, Joan de Gennville. His father dying in his minority, he was given in ward, by Edward I. to his favourite, Piers de Gaveston. While yet a youth, in order to emancipate himself from this guardianship, he paid Gaveston the sum of two thousand five hundred marks, in order that he might be declared of age and be put into possession of his estates. His conduct both in Ireland and Wales, where he held large domains, was extremely turbulent, and he was continually engaged in petty warfare with the neighbouring barons. When through the favour of the queen he rose to the enjoyment of uncontrolled power, his extravagant magnificence exceeded any thing that had been previously witnessed in the realm, and his pride was often so imprudently manifested, that his own son Geoffrey called him the King of Folly.

Edward was now at liberty to carry into action the designs he had nurtured with respect to Scotland and France; but he was hardly prepared

CHAP. 11. with sufficient money or troops to attempt a war of invasion with either of these powers. There were, as we have before observed, several English barons, who, during the sway of his grandfather, had been put into possession of large territories in Scotland, and had espoused Scottish heiresses to titles and domains. These barons were eager for a renewal of war with that kingdom, which, if successful, would put them again in possession of their honours and estates. Among these was Henry lord Beaumont, who had long resided in France to avoid the consequences of the enmity of Mortimer. In that country, Beaumont became acquainted with Edward Baliol, the son of that Baliol whom Edward I. had for some time placed on the Scottish throne, and persuaded him that if he would lay claim to the crown of Scotland, the English barons would aid him, and that he need not doubt of the enterprize being countenanced by the young English sovereign. Some historians assert that Beaumont had the authority of Edward to encourage Baliol with these expectations. However that may be, it is certain that Baliol ventured to come to England, and was in constant communication with the barons who had an interest in the undertaking.

Conspiracy of the Scottish claimants.

The barons concerned in this business, who were in any way connected with this county, were principally, Henry lord Beaumont and Thomas de Wake, lord of Chesterfield. The latter was the brother of Margaret, widow of Edmund, earl of Kent, who perished on the scaffold during the administration of Mortimer, to whose government he was in constant opposition. His father had been employed by Edward the First, in the Scottish wars, and had acquired extensive claims upon the territory of that kingdom. When the nobility of the realm forsook the king who had forsaken them through his attachment to his despicable favourites, De Wake joined the army of Isabella and Mortimer; but no sooner did he perceive that personal avarice and ambition were as manifest in the favourite of the queen as they had characterized the conduct of the favourites of her unfortunate husband, than he absented himself from their councils and refused to attend the parliament summoned by them at Salisbury in the year 1328. On account of his connexion with the earl of Kent, he very nearly shared his fate, but Mortimer contented himself with seizing his lands and driving him into exile. On the seizure and execution of Mortimer, his estates were restored to him, and he obtained letters from Edward to the king of Scotland, urging the restitution of the territories in that country, of which he had been deprived. Edward had given similar letters to other English barons who were claimants of Scottish estates, and this fact has been adduced as a proof that the young English sovereign encouraged the preparations of the barons for the invasion of Scotland.

Thomas de Wake.

Of these barons, Henry de Beaumont was the most active. He engaged them to join with him in a petition to Edward, whom they styled the lord paramount of that realm, to issue his commands to the earl of Murray, then regent of Scotland during the minority of David, for the restoration of their honours and estates. In this petition, De Beaumont styled himself the earl of Buchan. Edward received their petition with courtesy, but he returned them no public answer: to several of them, however, he gave

Henry de Beaumont.

letters, recommending the consideration of their claims to the regent. He seemed so far to discourage their enterprise, that he made a proclamation forbidding his subjects from joining in any expedition which might tend to disturb the peace happily existing between the two realms. It was, however, remarked, that this proclamation was not issued until the day after the expedition had sailed. CHAP. 11.

Confederates embark and place Baliol on the Scottish throne.

The small fleet that had been got together chiefly by the activity of De Beaumont, lay at anchor at Ravenspurg, and in the beginning of March, 1331, received Edward Baliol, the claimant of the Scottish crown, with the English barons and their military retainers. They shortly landed at Kingshorn, near Perth, and when the army was drawn up upon the shore, it was found to consist of less than two thousand five hundred men. In order to show the troops that they had nothing to trust to but their own valour, De Beaumont advised that the ships should be sent back to England, and in a very short space of time, this handful of men gained four important victories over armies four and five times their number, who were sent to oppose their progress. On the 27th of September, Edward Baliol was crowned at Scone, and immediately proffered his homage to the English sovereign for the Scottish crown.

Dissimulation of Edward.

There can be little doubt that these transactions were pleasing to the young king of England, but he was not yet prepared to avow himself the patron of this rapid conquest. On the representation of the Scottish ambassadors at his court, the estates of the English barons concerned in this enterprise were seized, and particularly those held by Henry de Beaumont in the counties of Derby, Leicester, Nottingham and Warwick. A negociation was at the same time commenced, in which the Scottish ambassadors agreed that Henry, earl of Buchan, Thomas lord Wake and others, should have restitution of their Scottish estates; and acknowledgments being made by these barons to the king that they had engaged in this expedition without his leave, for which they craved his pardon, their English possessions were also restored to them. It is plain that in these transactions Edward was endeavouring to keep up appearances, while his real design was to profit in due time by the success of Baliol and by the civil dissensions which that success would necessarily create. Young as he was, he was cool enough to repress his natural ardour, in order the more effectually to secure the object of his ambition. He pretended to the parliament that the discontents in Ireland were the principal subjects of his disquietude, and he demanded the means of conveying an army into that island; but the army, when raised, was ordered to march towards the confines of Scotland. In enumerating those knights and barons connected with Derbyshire, who attended Edward in these Scottish wars, we shall be called upon to mention the descendants of those whom we have spoken of in our preceding pages.

John de Segrave.

John de Segrave was the son of Stephen de Segrave, the governor of the tower of London when Mortimer escaped from that fortress. He was a mere boy when he accompanied his father to Gascony, and was scarcely of age at the period of which we are writing. So greatly was he distinguished by his prowess and military talents, that Edward bestowed upon him the

CHAP. 11. hand of his cousin, the princess Margaret, eldest daughter of Thomas de Brotherton, earl of Norfolk and marshal of England.

Nicholas de Cantilupe.

Nicholas de Cantilupe was lord of the manor of Ilkeston in Derbyshire: he had been much employed in the wars, which, during the last reign, had been carried on in Scotland with much loss and disgrace, and was esteemed an intrepid warrior. By king Edward III. he was highly estimated, and during this Scottish expedition, he was entrusted with the government of the fortress of Berwick upon Tweed. We shall find frequent mention of him during the reign of this heroic sovereign. His descent was from the second branch of the Cantilupes.

John de Bardolph.

John de Bardolph, whose father and grandfather, as we have already stated, were employed under Edward I. in the Scottish wars, was about eighteen years old when he was summoned to attend the king to the borders of Scotland. He obtained the favour of his sovereign, and was subsequently employed in Germany and Brittany.

Grey de Codnor.

Richard de Grey of Codnor had been engaged in all the unfortunate wars, both in Scotland and Gascony, during the last reign. On being summoned to attend Edward III. he pleaded his age and infirmities; and his eldest son, John de Grey, then nearly thirty years old, accompanied the king, and behaved himself so bravely, that in acknowledgment of his merit, he had a remission of all dues to the king's exchequer. His father died while he was in Scotland. He was afterwards entrusted with important missions in Flanders, and, "being so active a person," says Dugdale, "had such great esteem with the king, that, about that time, he received, at his hands, a hood of white cloth, embroidered with blue men dancing, buttoned before with great pearls. And, being to perform divers military exercises, in a tournament at Canterbury, had certain accoutrements of Indian silk, whereon the arms of Sir Stephen Cosyngton, knt. were painted, bestowed upon him by the king." We may add, that in the year 1353, when an invasion from France was apprehended, this John de Grey of Codnor was joined in commission with William lord Deincourt, to array all the knights, esquires and other able persons residing in the counties of Derby and Nottingham, and to conduct them to such places as should be needful for the defence of the realm. He was also employed in the wars of France, chiefly in the retinue of Henry, duke of Lancaster, and in the year 1360, he was constituted governor of the town and castle of Rochester for life. Three years afterwards he obtained the royal license to go on pilgrimage, and in his sixty-sixth year he received a special dispensation from all summons to attend the court or parliament, and an exemption from levies for soldiers.

Grey de Wilton.

Henry de Grey, of Wilton, then in possession of the manors of Stretton and Shirland in this county, had summons to attend the king. He had previously been employed in Gascony, and, in consequence of his services, a debt of £152. due from him to the exchequer was remitted. He died early in the expedition of Edward against France, to which he was assessed to furnish twenty men at arms and twenty archers.

Thomas le Blond.

Thomas le Blond (or, as it is generally written, Blount) and William le Blond were in the Scottish wars of Edward III. They possessed nu-

merous manors in the counties of Derby, Stafford, Leicester and Rutland. CHAP. II.
One of the ancestors of the Blounts, or Blonds, was William, who was slain at the battle of Lewes, fighting on the part of the barons. In him the elder branch became extinct, and the estates, which were chiefly in Lincolnshire and Suffolk, fell to the husbands of his two sisters. The younger branches of the Blounts rose gradually into dignities and wealth. The Thomas abovementioned, came into possession of extensive estates in this and the neighbouring counties, by his marriage with Juliana, the daughter of Thomas de Leyburne and widow of John lord Bergavenny: he was steward of the household to Edward II. but on the flight of his unhappy sovereign to Wales he joined the party of the queen and Mortimer, and was in parliament among the barons by whose vote the king was deposed. Thomas le Blond.

Henry Fitz Hugh was of a line of distinguished warriors who had taken no regular surname until this period, each son contenting himself with prefixing the word *Fitz* to the name of his father: the descendants of this Henry, who was employed in all the Scottish wars of the last feeble reign, and had been summoned to parliament as a baron, retained the name of Fitz Hugh, and became a wealthy and powerful family, possessing in this county the manor of Beighton, with large territories in Nottinghamshire and Yorkshire. This noble baron attended Edward III. on this occasion. Henry Fitz Hugh.

William d'Eincourt was lord of the manors of Holmesfield, Elmton and Cresswell in this county. Being young at this period, he served in the retinue of Eubulo l'Estrange in this Scottish expedition. He was afterwards employed beyond sea, and having been appointed commissary to the army, he returned to England for stores, when he obtained license to transport thirty-three sacks of his own wool towards the payment of the charges of his expedition. He was constantly in the wars of this reign, and was joined in commission with lord Grey of Codnor to raise troops in the counties of Derby and Nottingham. William d'Eincourt.

The family of D'Arcy was held in high favour by this great military monarch, and on this occasion John d'Arcy, then a youth, attended the king to Scotland, while his father was employed in Ireland, of which country he was governor and justiciary. D'Arcy.

Henry, styled earl of Derby during the life of his father, Henry, earl of Lancaster, attended the king in these Scottish wars and subsequently signalized himself in France. Henry, Earl of Derby.

The success of Baliol, as we have already remarked, had been surprising. The young king David of Scotland had been obliged to take refuge in France, with his queen, the sister of the king of England. Edward was not slow in taking advantage of these favourable circumstances. He marched against Berwick, and the governor, Sir William Keith, finding all means of defence, unless he could depend upon re-enforcements and supplies of provisions, to be hopeless, capitulated for the surrender of the town on a certain day, should he not be relieved by the regent, earl Murray, in the interval. Edward awaited the Scottish army at Halidon hill, and there, after a sanguinary engagement, the Scots were entirely defeated. The surrender of Berwick followed; and Edward having left with Baliol Battle of Halidon hill.

CHAP. 11. a body of troops to ensure the subjugation of the rest of the kingdom, and having garrisoned the castle of Edinburgh and most of the southern fortresses with his own soldiers, returned to England.

Various expeditions of Edward into Scotland.

Edward soon found, as his warlike grandfather had so often experienced, that the Scots were not subdued however they might be defeated. Shortly after his departure, the lords Douglas and Marr headed a large body of insurgents and drove Baliol from his throne, and Edward again entered Scotland with similar success, but his conquest was never secure; a third and a fourth time did he try the dreadful experiment of subjugating a brave and independent people by the sword, and would have pursued still further this cruel course of policy, had not a greater object given a new direction to his ambition. This object was the crown of France, to which he had long secretly aspired, and of which the circumstances of the French court seemed to favour the acquirement. Robert d'Artois, having been denied his claim to the earldom of that province, which Philip seized in the presumed right of his queen, who was cousin to Robert, came over to Edward and urged him to enforce his claims to the French crown. In the train of Robert d'Artois there came over to this country the famous James d'Arteville, a brewer of Ghent, who was so popular in the free towns of Flanders that he was able to draw them all to the English interest.

Campaign in Flanders.

Edward having strengthened his cause by alliances with the emperor and other potentates, commenced his enterprise by sending a body of troops over to Flanders; and some time afterwards followed in person with a fleet of five hundred sail. Various negociations and other important circumstances protracted his stay in Brabant, and it was not until the September of the ensuing year (1339) that he invaded the province of Cambray. This first campaign terminated without any general engagement, although the armies of Edward and of his rival Philip were encamped for some weeks at no great distance from each other, on the borders of Piccardy.

Second Campaign.

The second campaign was likewise undistinguished by incidents favourable to the ambitious views of the English sovereign. The preparations had been great, and in the month of June, 1340, Edward embarked at the mouth of the Orwell in Suffolk. Having received intelligence from Sir John de Chandos, who had sailed before him, that the French fleet, consisting of four hundred vessels, was in readiness to intercept him in his passage, he prepared to engage the enemy, notwithstanding their manifest superiority.

Naval victory.

This naval battle is one of the most glorious on record. Edward gave astonishing proofs of his bravery and prudence. The vessels grappled with each other, and the men fought furiously hand to hand, from eight in the morning until seven at night. At length, on the approach of night, the French, in a state of desperation, leapt into the sea, unable any longer to stand the encounter with their assailants animated by the presence of the king. Of the whole French fleet, only thirty escaped. The courtiers of Philip dared not to communicate this misfortune to him, and, it is said, that the melancholy message was entrusted to the court buffoon, who, in the king's presence cried out several times, "Oh those cowardly, faint-hearted Englishmen!" Philip demanded why he called them faint-hearted. "Why," replied the buffoon, "they dared not leap out of their ships into the sea, as our brave Frenchmen did."

Having landed in Flanders, Edward laid siege to Tournay; but as the town held out several weeks, and the besieging army was annoyed by the forces under Philip, which, without coming to a general engagement, had encamped at a short distance and intercepted the foraging parties of the besiegers, he was obliged to consent to a truce, which was to last until the Midsummer of the year following. In consequence of this unfortunate termination of the campaign that had commenced so brilliantly, the emperor and the duke of Brabant fell off from their alliance with the king of England, who returned to England greatly irritated at his want of success. He had no sooner resumed the reins than he complained to parliament of the conduct of the archbishop of Canterbury, his prime minister, whom he charged with obstructing the levy of the money voted to him for the expenses of the war; and, at the same time, he caused to be imprisoned most of the first officers of state, amongst whom was Thomas lord Wake, of Chesterfield, all of whom he accused of having acted dishonestly in the levy of the late subsidies. CHAP. 11. Siege of Tournay. Imprisonment of statesmen.

Whilst thus irritated against the ministers of his government, and discouraged by the defection of his allies, and by the reflection that in two campaigns he had made no advance towards the obtainment of his object, Edward suddenly found his hopes revived, by the offer of John de Montfort, one of the claimants of the duchy of Bretagne, to acknowledge his title to the crown of France, to do him homage and to aid his design. Troops were instantly raised and sent into Bretagne in order to assail the territories of Philip from that quarter, but still nothing effective was performed, and the rival monarchs shortly after consented to submit to the mediation of the pope and agreed to a truce for three years. John de Montfort.

The affairs of Scotland demanded the attention of Edward. The obedience of that people to Baliol was partial and temporary. Robert Stuart, who acted for David Bruce, had rallied the patriotic spirit of the Scots and had driven Baliol, who was everywhere regarded as the lieutenant of the king of England, to those southern provinces of the realm which were garrisoned and defended by English troops. These circumstances instigated Edward to attempt the subjugation of Scotland once more, and for that purpose he prepared to invade it both by sea and land. The Scots, intimidated at his purpose, sent ambassadors offering to acknowledge him as sovereign of Scotland, should David not return from France with succours before the ensuing month of May. David, on receiving intelligence of this truce, speedily re-visited Scotland with a large body of forces, furnished him by Philip. On his arrival he was joined by numbers of his subjects, and crossing the borders, he laid waste the northern counties of England, besieged and took the city of Durham and put all the inhabitants to the sword. Alarmed by intelligence that Edward was advancing in person, at the head of a large army, he commenced his retreat to Scotland; but a part of his troops being attacked and deprived of their plunder by the garrison of Werke castle, he determined to lay siege to that fortress. Affairs of Scotland.

The castle of Werke, in Northumberland, had been held by the earl of Salisbury, then recently dead, in consequence of bruises received at a tournament at Windsor. He had stood high in favour with the king, and had Siege of Werke.

CHAP. II. obtained the wardship of the princess, Joan, daughter of Edmund, earl of Kent, whom, with the consent of Edward, he caused to be betrothed to his eldest son, in the infancy of the contracted pair. Joan had been so remarkable from her childhood for her beauty, that she was known by the name of the Fair Maid of Kent, and the possessions to which she was either immediate or presumptive heiress were great; including in this county alone, besides the town of Chesterfield, the manors of Longstone, Sheldon, Wardlow, Holme and Ashford. It is probable that the earl of Salisbury, having been very recently appointed to a command on the borders, had been accompanied by his lovely ward and intended daughter-in-law to his castle of Werke. Froissard intimates that she had command of the castle, or that she held it in her own right, at the time of its being besieged by the king of Scotland; but she could not then have been more than fifteen or sixteen years of age, and it is not unlikely that the widow of the deceased earl also resided at Werke, and that the countess dowager and the intended countess have been spoken of somewhat confusedly in his narrative. The young earl, who is stated to have been fifteen years old at his father's death, had been placed under the tutelage of John de Somerton and Thomas Waryn.

The Fair Maid of Kent.

Thomas de Holand.

It cannot for certain be shown that the youthful warrior, Thomas de Holand, who, by his influence over the heart of the Fair Maid of Kent, contrived to cancel her betrothment to the young earl, was resident at Werke castle at the period of the siege. Thomas de Holand was the son of the Robert de Holand of whom we have already made mention; and in early life he was received into the family of Montacute, earl of Salisbury, and was appointed by him steward of his household. In the expeditions of the king to Flanders, during the two preceding years, he was in the train of his patron, and it is likely enough that when the earl received an appointment upon the borders of Scotland, Thomas de Holand would accompany him and have a command in the garrison of Werke castle at the time of his death. An historical novelist would undoubtedly place him at that spot during so interesting an occasion and find opportunities to unite the triumphs of both love and war. All that we can discover in the narratives of the old historians, is, that the castle was defended with such bravery, that although it was stormed several times and one of the towers demolished, the king of Scotland and his army were obliged to retire from before it. That the approach of Edward was the principal cause of the Scots retiring may be suggested without depreciating the valour of the garrison or the intrepidity of the countess and her gallant defenders. The king arrived immediately upon the departure of the Scottish army, and was not sparing of his compliments to his young cousin upon her having sustained so desperate a siege, and some serious as well as romantic historians have told us that he fell in love with her upon that occasion. He remained at Werke only until the next day; and then went in pursuit of the Scottish monarch. This expedition terminated in a truce between England and Scotland.

Truce with Scotland.

Edward employed this interval in domestic regulations; and as he found that in favouring the liberties of his subjects and leaving them the free

enjoyment of the legislative power as regarded the general interests of society, they were ever more inclined to promote the great objects of his ambition, he voluntarily confirmed the Great Charter, and promoted the enactment of statutes favourable to the due administration of justice. But while engaged in the works of peace, his mind was bent upon the renewal of war, and his thoughts were continually busied about the means of forming alliances and of leading a powerful army into the heart of France. His allies in his former campaigns had deceived him; and he looked no longer to the sovereigns of Germany or Flanders, whom he had found greedy to receive his money but negligent in supplying the troops agreed upon. He, therefore, changed his plan, and entered into private negociations with the warlike subjects of these potentates, who, according to the feudal system, could levy soldiers from their own territorial possessions, and by the practice of the period were accustomed to engage, as soldiers of fortune, in the armies of the great European monarchs. In order to draw to his court an abundance of these baronial cavaliers, he proclaimed the holding of tournaments on a scale of extraordinary magnificence. A circular hall or theatre was constructed at Windsor, two hundred feet in diameter, which contained a round table, in imitation of king Arthur, at which all the knights that arrived were feasted. Philip of France, jealous of the influence which his rival was acquiring by these splendid festivities, which, he was aware, served chiefly to cover the private agreements for the levy of troops, soon to be used against himself, instituted similar tournaments in various parts of France; but having discovered that some knights who had been drawn to them by the splendour of them and by the custom of the times, had secretly entered into engagements with Edward, he caused them to be seized and beheaded. In vain did Philip endeavour to vindicate himself from a charge of treachery so contrary to the received principles of chivalry; Edward, glad of a pretence to resume the war, proclaimed to all Christendom that the truce had been broken by this atrocious violation of the laws of knighthood.

Great Charter confirmed.

Tournaments.

Treachery of Philip.

Henry, earl of Lancaster, or rather, the earl of Derby, for his father was yet alive, although then on his death-bed, was sent with an army into Guienne. Richard Fitz Alan, earl of Arundel, was joined with him, in command, and these leaders were accompanied by Hastings, earl of Pembroke, Vere, earl of Oxford, lord Stafford, Sir Walter de Manny and several other barons and knights.—The earl of Lancaster had greatly distinguished himself during his father's life, while he was known by the title of earl of Derby. He was employed in the wars during the preceding campaigns, and was sent over to clear the isle of Cagant of a garrison which the French had placed there. On the first onset he was beaten to the ground, but by the valour of the famous Walter de Manny he was brought safely off, to the great joy of his military adherents, who rushed forward with intrepidity, while the brave Sir Walter shouted "Lancaster! for the earl of Derby." As great part of the earl's estates lay in this county, we may suppose many of the men of Derbyshire to be comprehended in the cry of "Lancaster!"—He had command also in Flanders and was at the great sea fight, already mentioned, before Sluys.

Henry, Earl of Lancaster.

CHAP. 11.

Sir Walter de Manny.

Sir Walter de Manny was by birth a foreigner and soldier of fortune, born in the archbishopric of Cambray. He attended Isabella, mother to Edward III. into England, and rapidly rose into the confidence of the young king, and became possessed* of manors in various counties. In Derbyshire he held Bretby and the neighbouring district. He was a man who had imbibed the chivalric spirit of the period. Having promised various ladies, under whose colours he had tilted with success in numerous tournaments held at the court of Edward, that their knight should be the first to enter France and to take some castle, he, on the defiance of war to Philip of France being proclaimed, rode with forty adherents, armed with spears, through Brabant and Hainault without resting, and crossing the borders of the French territories, with his pendant displayed, entered the town of Mortaigne, and marched down the High Street in open day. On arriving at the extremity, he found the gate closed, the tower garrisoned, and the populace shouting "Treason, treason!" On this, perceiving that he and his troop were in danger of being taken, he caused the wooden houses on each side the street to be set on fire, and in the confusion that ensued rode on through Condé and Valenciennes, and to a strong castle called Tiné, which he took by surprise. Committing this prize to his brother, Giles de Manny, he rode back almost wholly unattended and joined the king at Mechlin.

Expedition to Guienne.

This expedition to Guienne, with which the most important campaign in the war of Edward for the crown of France commenced, was embarked at Southampton and landed at Bayonne, on the 6th of June, 1344. The body of the army consisted only of five hundred knights and two thousand archers. At Bourdeaux, to which the earl immediately marched, he was received by the inhabitants in solemn procession, and publicly entertained for fifteen days. He then proceeded towards Bergerac, in which town, situate on one of the main branches of the Garonne, the French were stationed, in great force. When within sight of this place, the English army halted for refreshment, and there being some complaint of the deficiency of wine, Sir Walter de Manny, who was one of the marshals of the army, said to the royal earl, "If we were good men at arms, we should drink this evening with the French officers at Bergerac." The brave earl replied, "For my part, I'll be no hinderance: taste their wine, if you will."

Siege of Bergerac.

The rest who were present shouted out "To arms." The assault commenced as soon as they could arrive at the walls, but finding themselves resolutely opposed, orders were despatched to the boats which had accompanied them up the river, to attack the town on the other side. The town instantly surrendered, but the soldiers could not be restrained and it was given up to plunder. During the sacking of the place, a Welsh knight had the good fortune to enter the office of the receiver general of the taxes, and being astonished at the sight of so much money, he was afraid to meddle with it, thinking that none but princes or generals were entitled to so much plunder at once, as he then saw before him. He hastened to the earl of Lancaster, and informed him of the booty; and was, no doubt, very pleasingly surprised, when the noble earl told him it was all his own.

* By marriage with Margaret, daughter and heiress of Thomas de Brotherton, earl of Norfolk, and widow of John de Segrave.

After taking Bergerac, the towns of Upper Gascony surrendered to this small army of brave Englishmen one after another. They then attacked the castle of Peligren, but before it could be taken, the garrison sallied out and took the earl of Oxford prisoner. That fortress was shortly carried by assault, and the earl was rescued. The town and castle of Auberoque cost them some trouble; and no sooner did it fall into their hands, than it was invested by a large re-enforcement of the French army. The young earl of Lancaster immediately sent to Hastings, earl of Pembroke, whom he had left at Bergerac, and likewise to lord Stafford, to meet him on his march, and proceeded with Sir Walter de Manny towards Auberoque. The army halted for a day at Lybourne, expecting Hastings, but the troops were impatient to engage the enemy, and the earl of Oxford, Sir Walter de Manny, Sir Richard Hastings and lord Ferrers, who commanded a company of archers from Derbyshire and Leicestershire, urged an immediate surprisal of the enemy's camp. The army marched all night, and at break of day, were within two miles of Auberoque. The men were then refreshed and the horses were turned out to graze, while a deep wood served as a temporary place of concealment. Scouts were sent out to take note of the position of the French on one side, and to look out for the arrival of Hastings on the other. All were in a state of anxious agitation; particularly as they found that the foe, who lay strongly encamped before the town, consisted of ten or twelve thousand men, while their small army, reduced by continued warfare and by placing garrisons in various towns and castles, did not muster above three hundred horsemen, armed with spears, and six hundred archers. The time advanced and no tidings arrived of the approach of the earl of Pembroke. Sir Walter Manny repeatedly swore that the brave men whom they had left in the castle of Auberoque should not fall prisoners to the French whilst he had life; and, the evening approaching, Sir Walter, no longer able to restrain his daring spirit, seized his horse, and exclaimed, "Sirs, let us leap upon our horses, and coast under the covert of this wood, till we be on the same side that joineth their encampment; and when we be there, let us put spurs to our horses and cry our cries. We shall enter while they be at supper and not aware of us: then shall you see them so discomfited that they shall keep no array." The earl of Lancaster agreed to the bold proposition. The army proceeded eagerly round the wood until they came opposite to that side of the French camp which was occupied by the men of Gascony, who had been forced into the French service, and among whom they had many friends. The leaders were regaling themselves when the cry of "A Derby! a Derby!" accompanied by a shower of arrows and a fearful onset of the knights, threw the whole camp into confusion. The tumult was increased by the conflagration of the tents, which Sir Walter Manny ordered his followers to set on fire; so that by the smoke as well as by the approach of night, the numbers of the assailants could not be discerned. The English slew, at the very onset, several hundreds. Among the numerous prisoners were the counts de Laille and de Pieregort, with other eminent noblemen. The enemy lost, in this affair, not fewer than seven thousand men. The historian Walsingham states, that among the plunder

CHAP. 11.

Success in Guienne.

Defeat of the French at Auberoque.

CHAP. 11. of Bergerac alone, was a wine pipe full of gold, which the earl of Lancaster distributed with such munificence, that warriors from all parts were induced to join his standard. He took numerous other towns and laid siege to the strong town and fortress of Montsegur, which he repeatedly assaulted during fifteen days before he became master of it. He was besieging the town of Angouleme, which occupied him a month before its surrender, when he heard of the death of his father, who had just lived long enough to be made acquainted with the glorious victories of his son, by which the whole province of Guienne was recovered to the crown of England. Such a series of successes, by so small an army, is almost without a parallel in the pages of history. The death of his father being known to the army, he was saluted, in a military manner, with the titles of honour to which he had succeeded, but he retired mournfully to his tent, lamenting aloud that he could not attend the funeral obsequies of his parent, and shortly after withdrew the remnant of his brave adherents to Bourdeaux.

Death of the Earl of Lancaster.

END OF THE FIRST PART OF VOLUME ONE.

APPENDIX.

APPENDIX.

(No. 1.)

The LIBERTIES *and* CUSTOMS *of the* LEAD MINES *within the Wapentake of Wirksworth in the county of Derby, part thereof appearing by extracts from the bundles of the Exchequer, and inquisitions taken in the 16th year of the reign of king Edward the first, and in other king's reigns, and continued ever since.—Composed in meter by Edward Manlove, esq. heretofore steward of the Barghmoot Court, for the lead mines within the Wapentake.*

London, Printed, Anno Dom. 1653.

3 and 4, Philip and Mary, Article 4.

By custom old, in Wirksworth wapentake,
If any of this nation find a rake,
Or sign, or leading to the same, may set,
In any ground, and there lead oar may get:

16, Edw. 1. cap. 2.

They may make crosses, holes, and set their stowes,
Sink shafts, build lodges, cottages, or coes.
But churches, houses, gardens, all are free
From this strange custom of the minery.

3, E. 6. Art. 14.

A cross and hole a good possession is

Phil. and Mary, Art. 11.

But for three days, and then the custom's this,
To set down stowes, timbered in all men's sight,
Then such possession stands for three weeks right

Phil. and Mary, Art. 11, and 25.

If that the stowes *bossinned* and well wrought,
With yokings, sole-trees, else they stand for nought;

3, Edw. 6. c. 2.

Or if a spindle wanting be to nick,
'Tis not possession, no not for a week;
But may be lost, and by another taken,
As any grove that's left, quit or forsaken:
For the Barghmaster (by the custom) ought
To walk the field, to see that works be wrought,
And on the spindle ought to let a nick,
If that the grove unworked be three week,
And every three weeks, until nine weeks end,
To nick the miners' spindles that offend;
And when the spindle nicked is three times,
According to the custom of the mines,
Then the Barghmaster may the stowes remove,
And he that set them loseth the same grove;
Unless the work by water hindered be,
Or else by wind, the miner then is free
From losing any meer of ground or grove,
For then such stowes none ought for to remove;
And the Barghmaster ought to make arrest,
Upon complaint, if mines be in contest,
Receiving four pound for his lawfull fee,
That the next court the wrong redressed may be.

16, Ed. 6. c. 2.

The vulgar term is, setting for a mine,
For th' grace of God, and what I there can find,

And then at him some other miners take,
And gain possession in the selfsame rake;
Another miner for a cross-vein sets,
Some take at him, and then possession gets.
Some take for one thing, some for other free,
As new thing, old thing, cross-vein, tee, or pee.

16, Edw. 1. c. 1. Art. 1. But yet a difference may be taken clear,
Betwixt a founder, and a taker meer;

3, Edw. 6. Art. 11. Because the finder that doth find a rake,

3 and 4, Phil. and Mary, Art. 20. May have two meers met, and set out by stake,
Which is in length twice eighty-seven feet,

16, Edw. 1. c. 2. And so is to be measur'd and laid out.

3, Edw. 6. Art. 15. But first the finder his two meers must free

3 and 4, Phil. and Mary, Art. 22. With oar there found for the Barghmaster's fee,
Which is one dish for one meer of the ground,

16, Ed. 1. Art. 1. The other's free; because the miner found;
But by incroachment they do two demand,

3 and 4, Phil. and Mary, Art. 20. And wrong the miner, which they might withstand;
Then one half meer at either end is due,

16, Edw. 1. c. 2. And to the lord or farmers doth accrew;
And if two founders in one rake be set,
Perchance the farmers may a prime-gapp get.
Then must the miners chase the stole to th' stake,

16, Edw. 1. c. 2. From meer to meer, and one at other take:
Each taker gains a meer, no more he can
Have that finds oar in working an old man.
And he (by custom) that his mine doth free,

16, Edw. 1. Art. 9. A good estate thereby doth gain in fee,
And if he die, and leave behind a wife,

ibid. The custom doth endow her for her life;
But if the grove be lost for want of stowes,
Or forfeited, her dower she doth lose.
By word of mouth eke any miner may
Such fee and freehold freely give away.

3, Edw. 6. Art. 1. Egress and regress to the king's highway

Art. 6. The miners have, and lot and cope they pay.

3, Edw. 6. Art. 3. The thirteenth dish of oar within their mine,

3 and 4, Phil. and Mary. Art. 13 and 5. To th' lord for lot they pay at measuring time,
Sixpence a load for cope the lord demands,
And that is paid to the Barghmaster's hands;
Against good times the lord ought to provide
A lawful measure equal for both sides,

3, Edw. 6. Art. 4. Both for the buyers and the sellers' use,
And forfeits forty-pence if he refuse;

3 and 4, Phil. and Mary, Art. 6. And he that sells by any other dish,
His oar so sold, thereby forfeited is;
Small parcells yet poor men may sell for need,
If they cannot procure the dish with speed;
Provided always that to church and lord
They pay all duties custom doth afford,
For which the vicar daily ought to pray
For all the miners that such duties pay,
And reason good, they venture lives full dear
In dangers great, the vicar's tythe comes clear;
If miners lose their lives, or limbs, or strength,
He loseth not, but looketh for a tenth;

But yet methinks if he a tenth part claim,
It ought to be but a tenth of clear gain,
For miners spend much money, pains, and time,
In sinking shafts before lead oar they find,
And one in ten scarce finds, and then to pay
One out of ten, poor miners would dismay.
An admonition to the ministers that receive tythe of lead oar.
But use them well, they are laborious men,
And work for you, you ought to pray for them.
And suit for oar must be in Barghmoot court,
For justice thither miners must resort;
3, Edw. 6. Art. 9.
If they such suits in other courts commence,
3 and 4, Phil. and Mary, Art. 16.
They lose their due oar debt for such offence,
And must pay costs, because they did proceed
Against the custom; miners all take heed.
3, Edw. 6. Art. 20.
No man may sell his grove that's in contest,
3 and 4, Phil. and Mary, Art. 26.
Till suit be ended, after the arrest;
The seller's grove is lost by such offence,
The buyer fined, for such maintenance.
16, Edw. 1. c. 2.
And two great courts, of Barghmoot ought to be,
3, Edw. 6. Art. 10.
In every year, upon the minery;
3 and 4, Phil. and Mary, Art. 19. 30 and 33.
To punish miners, that transgress the law,
To curb offenders, and to keep in awe
Such as be *cavers*, or do rob men's coes,
Such as be pilferers, or do steal men's stowes;
To order grovers, make them pay their part,
Join with their fellows, or their grove desert;
To fine such miners as men's groves abuse,
And such as orders to observe refuse;
3 and 4, Phil. and Mary, Art. 31.
Or work their meers, beyond their length and stake,
Or otherwise abuse the mine and rake,
Or set their stowes upon their neighbour's ground
3 and 4, Philip and Mary, Art. 4 and 5.
Against the custom, or exceed their bound;
Or purchasers, that miners from their way
To their wash-troughs do either stop or stay;
Or dig or delve in any man's bing-place,
Or do his stoes throw off, break or deface;
To fine offenders that do break the peace,
16, Edw. 1. c. 2.
Or shed men's blood, or any tumults raise,
Or weapons bear upon the mine or rake,
3 and 4, Phil. and Mary. Art. 28.
Or that possessions forcibly do take,
Or that disturb the court, the court may fine
For their contempt, (by the custom of the mine)
And likewise such as dispossessed be,
And yet set stowes against authority;
Or open leave their shafts, or groves, or holes,
By which men lose their cattle, sheep, or foals;
And to lay pains, that grievance be redress'd,
To ease the burdens of poor men oppress'd;
To swear Barghmasters, that they faithfully
Perform their duties on the minery;
And make arrest, and eke, impartially,
Impannell jurors, causes for to try;
And see that right be done from time to time,
Both to the lord, and farmers, on the mine;
To swear a jury for a half year's time,
(By custom called) the body of the mine,

Who miners are, and custom understand,
And by the custom they have some command.
They may view groves when miners do complain,
Relieve the wronged, wrong-doers restrain.
They may view trespass done in any grove,
Value the trespass, trespassers remove.
They may lay pains that workmanship be made,
And fines impose if they be not obey'd.
They may cause opens, drifts, or sumps, to see
If any one by other wronged be.
When strife doth rise in groves, the miners all
These four and twenty miners use to call,
To make inquiry, and to view the rake,
To plum and dial (if beyond the stake
A meer be wrought, and miners wronged be,)
For by that art they make discovery.

3 and 4, Phil. and Mary, Art. 19. The steward ought a three week's court withall,
To keep at Wirksworth in the Barghmoot hall.

Art. 29. do. For hearing causes (after the arrests)
And doing right to them that be opprest.
And if the Barghmaster make an arrest,
The steward may (at the plaintiff's request)
Appoint a court for tryal on the rake,

Art. 8. do. Within ten days, that th' jury view may take,
And for attendance there, the steward he
By mineral custom, hath a noble fee.
Four shillings to the jury must be paid,
Who for that cause were summon'd and array'd.
And if a verdict be for the plaintiff found,
The Barghmaster delivers him the ground;
And if the adverse party him resist,
The four and twenty ought him to assist,
Then may he work (by custom) without let,

3, Edw. 6. Art. 13. Till the defendant do a verdict get.
Then the Barghmaster ought to do him right,
Him to restore unto his ancient plight;
But if three verdicts for the plaintiff's found,
By custom the defendants all are bound;
So if three verdicts with defendants go,
The plaintiffs are (by custom) bound also.
And neither side may make a new arrest,
For the same title that was in contest;
But yet the Duchy court (if just cause be)
May yield relief against these verdicts three:
Or by injunction parties all injoin
From getting oar in such a meer or mine,
Untill the cause be heard, and there appear
A title just for them that worked there,
Or may appoint a steward that may try
The cause again upon the minery.
And may sequester any such lead-mine
Untill the title shall be try'd again.

3 and 4, Phil. and Mary, Art. 8 and 29. And if the plaintiff chance non-suit to be,
He pays a noble for a penalty;
For which (by custom) Barghmasters distrain,
The party non-suited must pay the pain.

Art. 10. *do.*
No miner's timber, pick, or lawful stowes,
May be removed from their ground or coes;
16, Edw. 1. c. 1.
If by mischance a miner damped be,
Art. 12.
Or on the mine be slain by chance-medley,
3 and 4, Phil. and Mary, Art. 21.
The Barghmaster or else his deputie,
Must view the corps before it buried be.
And take inquest by jury, who shall try
By what mischance the miner there did die;
No coroner or escheator aught may do,
Nor of dead bodies may not take their view.
16, Edw. 1. c. 2.
For stealing oar twice from the minery,
The thief that's taken fined twice shall be,
But the third time that he commits such theft,
Shall have a knife struck through his hand to th' haft,
Into the stow, and there till death shall stand,
Or loose himself by cutting loose his hand;
And shall forswear the franchise of the mine,
3 and 4, Phil. and Mary.
And always lose his freedom from that time.
No miner ought of an old man to set
To seek a lead-mine, or lead oar to get,
Untill the Barghmaster a view hath taken,
And find such work an old work quite forsaken;
With him two of the body of the mine
To take such view (by custom) ought to join;
Which being done the miner may go on
To sink, and free his meer (the lord hath none)
If oar be found, the fruit of his desire,
And woughs be strete the miner then may fire,
Yet not at all times of his own accord,
But at such times as custom doth afford
I'th' afternoon, and after four o'clock,
He may make fire on the ragged rock;
But first he must give notice, lest the smoke
(In other groves) his fellow miners choke;
And after notice if they careless be
And lose their lives, the firers shall go free.
3, Edw. 6. Art. 17.
If miner's groves arrested be, yet they
3 and 4, Phil. and Mary, Art. 24.
Go on and work, the arrest must make no stay,
But for oar got before the tryal be,
The Barghmaster must take security,
And at next court all parties do appear,
And the arrest must be returned there,
And then and there, the cause must tryed be
Before the steward of the minery.
Most of the customs of the lead-mines here
I have describ'd, as they are used there;
But many words of art you still may seek,
The miner's terms are like to heathen Greek,
Both strange and uncouth, if you some would see,
Read these rough verses here compos'd by me.

Bunnings, polings, stemples, forks, and slyder,
Stoprice, yokings, soletrees, roath, and rider,
Water-holes, wind-holes, veins, coe-shafts, and woughs,
Main-rakes, cross-rakes, brown-henns, buddles, and soughs.
Break-offs, and buckers, randum of the rake
Freeing, and chasing of the stole to th' stake.

Starting of oar, smelting, and driving drifts,
Primgaps, roof-works, flat-works, pipe-works, and shifts,
Cauke, sparr, lid-stones, twitches, daulings, and pees,
Fell, bous, and knock-barke, forstid oar, and tees,
Bing-place, Barmoot court, Barghmaster, and stowes,
Crosses, holes, hange-benches, turntree, and coes,
Founder-meers, taker-meers, lot, cope, and sump,
Stickings, and strings of oar, wash-oar, and pump,
Corfes, clivies, deads, meers, groves, rake-soil, the gauge,
Binge-oar, a spindle, a lamp-turn, a fauge,
Fleaks, knockings, coestis, trunks, and sparks of oar,
Sole of the rake, smitham, and many more.

This have I written for the miner's sake,
That miners are in Wirksworth wapentake;
Perchance if these few lines accepted be,
An exposition may be made by me,
Of mineral terms, to most men now abstruse,
Which by expounding may be of more use;
But for the present, I commit to view
This little book, the mineral law to shew;
Which ancient custom hath confirm'd to them
That miners are, and poor labourious men,
And much desire this custom to present
Unto the worthies of the parliament,
And humbly pray, that they for justice sake,
Will them confirm in Wirksworth wapentake.

Good reader, spare me if I thee offend
With this strange custom, which I here have penn'd;
But miner read me, take me for thy friend,
Stand to thy custom, thus my poems end.

FINIS.

Copied from an examined copy taken out of the Duchy office, 14th of April, 1746, by
T. Gell.
T. Heron.

(No. 2.)

De MIRABILIBUS PECCI: *poema, latine scriptum a Thoma Hobbes, Malmsburiense.*

Ad Nobilissimum Dominum Gulielmum Comitem Devoniæ, &c.

DE MIRABILIBUS PECCI.*

CARMEN.

Hobbes's Poem.

ALPIBUS Angliacis, ubi Pecci nomine surgit
Darbensis Regio, montes ad sidera tollens,
Fœcundasque rigans non uno flumine valles,
Stat† Chatsworth præclara domus, tum mole superba,
Tum Domino, magnis: celerem‡ Deroentis ad undam
Miranti similis portam præterfluit Amnis,
Hic tacitus, saxis, infra supraque, sonorus.
At Mons terga domûs rapidis defendit ab Euris,
Ostendens longè exertis juga consita saxis,
Præsectoque die, producens tempora somni.
Summovet à tergo rupes gratissimus hortus,
Pinguis odoratis ubi tellus floribus halat;
Arbor ubi in mediis§ silvis sibi libera visa,
Dat fructus injussa suos; ubi frondea tecta
Arboreis præbent invito frigora sole
||Porticibus, potiora tuæ, Maro, tegmine fagi,
Ars ubi, dissimulans artem, simulavit (ineptos
Consocians ferro lapides guttaque peresos)
Informes¶ scopulos, & frigida fontibus antra.
Libera nativis veniens a rupibus unda
Accedit positis, **patrio captiva metallo,
Et tellure latens, duplicem jaculatur in orbem,
Jussa, suum laticem per mille foramina cæca,
Et scopulum complexa tenacibus undique†† venis,
Jussa fugat misso subeuntes desuper imbre.
Hinc avecta creat sublimen marmore fontem,
Atque ingressa domum Promos conserva Cocosque
Adjuvat; in mediis surgitque penatibus, alto
Infundens nitidam manibus de marmore lympham,
Et quamvis tubulis tantum effluat illa quaternis
Non tam‡‡ Calliroe pulchrè fluit Enneacrune.
Rejecto paulum fluvio, sese ingerit horti
Angulus alterius, tecta alta à fronte videntis.
Disposita hic gemino collucent ordine§§ stagna,
Immersum tremulis undis quatientia solem,
Queis magno numero salit & lascivus inerrat
Non intellecto conclusus carcere piscis.
Quàm juvat, hic, quoties piscatrix candida prædam
Abjicet illectam, morem observare puellis

* The Peak. † Chatsworth. Mirab. l. ‡ Derwent. § Prunetis in ipso horto, sylvas imitantibus. || Ambulationibus. ¶ Rupes ante compositas. ** Plumbo quod in ac regione, terra effoditur. †† Tubulis plumbeis. ‡‡ Fons Athenis sacer, novem effluens fistulis. §§ Piscinæ.

Hobbes's Poem.

Innatum, captare viros, and spernere captos!
Quàm libet in mediis mirari fluctibus, alto
Aggere suspensos hortos! quæ Cæsare moles
Digna, Cavendisiâ certè est in gente pusillum
Fœmineumque opus. At quota pars ea laudis Elizæ
Salopicæ? quæ multa, & magna palatia struxit;
Magnas divitias; magnamque bonamque paravit
Famam; quæ magnos sibi conciliavit amicos,
Ornavitque humiles; multam, magnamque reliquit
*Prolem, qua regio late nunc usque beatur.
Quam dulce est, inter, circumque nitentia stagna
Instratasque vias, æstivâ semper arenâ,
Discipulum memet naturæ tradere rerum;
Aut Domino exiguum meditari carmine† Munus,
Et multum Musis, describere rura, rogatis.
Commodiore loco non usquam habitare, nec, usquam
Candidiore frui Musæ censentur amico.
Hinc, ad tecta, solo surgente, ascenditur, extra,
Augusta aspectu, sublimia, regia; & intra
Commoda, culta, capacia, splendida, ditia tecta.
At tu marmoreis quæ sint descripta figuris
Ficta Poetarum, priscorum aut facta virorum,
Ne cures, duro nec certans marmore Gypsum.
Ingenuos nec tu cupias numerare ministros,
Sed Dominum, mea Musa, colas, cui gente vetustâ
Orto dat titulos Devonia, Derbia‡ curas.
Acrem judicio; constantem pectore; lautum;
Utentemque opibus, luxu sine, & inter amicos.
Ille Chori vestri summum decus; ille benigna
Otia dat Musis; sed & illi Musa diserto
Ore loqui, atque animo secernere turpia honestis.
Tum§ Dominam spectes, altâ de gente Brusorum
Magnanimo proavos spirantem pectore Reges.
Amborumque vide Sobolem, imprimisque|| Puellam
Dignam, qua caleant Superi, binosque¶ Puellos
Angelicos, casti communia pignora lecti.
Hos tu mireris, sobolemque & utrumque parentem;
Cætera quæ referes miracula, sunto minoris.
Alti censentur septem miracula Pecci.
Ædes, Mons, Barathrum, binus Fons, Antraque bina.
Scilicet illæ ipsæ, quas jam memoravimus, Ædes
Ornatæ, tot sunt inter miracula, primæ.
Intra has de reliquis orto sermone, quibusdam
Est visum promptis rerum perdiscere causas,
Et mihi (namque operæ pretium est) ea visere mira.
Anni tempus erat quo tellus fœnora solvit;
Et vitreum sectis absterserat altus aristis
Jam Phœbus rorem, cum tecto excedimus, ipsi,
Duxque viæ servusque (sed ille vicarius) unus.
Egressi auferimur portis, petimusque propinquam
Pilsley, dein Hassop salebroso tramite. Montem
Hinc celsum acclivemque, gradu lento, & pede lasso
Scandit equus, summumque jugum mox calcat anhelus.
Conversi miramur aves jam repere segnes,

* Comites Devoniæ, Novi-castri, Kingstone, nepotes Commitissæ Salopiensis. † Hocipsum.
‡ Præfecturam militiæ in agro Derbensi. § Christianam Comitissam Devoniæ.
|| Dominam Annam Cavendish. ¶ Gulielmum nunc Comitem Devoniæ cum Fatre Carolo.

Hobbes's Poem.

Atque humiles claro transfigi vertice nubes.
Chatsworth jam punctum, Deroen jam linea curva est.
Vix iter inceptum sequimur, cum levia montis
Aspicimus crebro lacerari vulnere terga,
Lateque egestâ* liratim albescere terrâ.
Est sublime solum, tenuique friabile glebâ,
Quod ne quando suâ possit subsidere mole,
Natura ingenito suffulcit provida saxo.
At saxum innumeris divisit in ordine rimis,
Ater opum Dominus: cunctasque ita solis ab ortu
Duxit in occasum, non ut sensisse calentem
Lampada Phœbæam, sed & aspexisse putares.
Condidit his sulcis melioris cruda metalli
Semina, solari post perficienda calore,
Tutanda interea duræ munimine rupis
Ditis avara manus frustra. Nam nec satis igne
Concoquit obliquo Sol plumbi terrea frusta,
Nec custodit humus sibi credita. Viscera terræ,
Certus opum quacunque latent regione repostæ,
Insidiator homo, ferro pervadit &† igne,
Saxea plumbiferæ rescindit tegmina venæ,
Exhauritque, audax jam, paupertate jubente,
Tartarei prædo fiscum spoliare Tyranni.
Haud impune aliquando. ‡Duos telluris in imo
Deprensos gremio, Mors occupat, atque profundo
Oppressos tegit, ipsi quod fodêre, sepulcro.
§Spiramenta (tubis ægrè admittentia|| iniquis
Quos castigato detrudit inedia ventre)
Ligniculis intus¶ vincit, venamque sequutas
Materie fossas sustentat, gnara pericli,
Atque experta, diu jam gens** damnata metallis;
Vt non incautos scires periisse, sed Orco
Quæsitos. Terræ hic subducit fulcra caducæ,
Expressasque animas, vicinis congregat umbris.
Corpora corporibus quærunt. Sic credita sæpe est
Emissa amissam monstrasse sagitta sagittam.
Ante pedes unum terra jacet ecce cadaver
Effossum; nostrique monet meminisse. Cadaver,
Marcida, iners, putris, nostrique simillima res est.
Alterum adhuc tectum tellure,†† resurgere corpus
Expectat. Sedet egestæ super aggere terræ
Turba supina, locis spectatum egressa propinquis;
Plorantesque duæ mulieres. Altera sueta
Gaudia perdiderat; spem amiserat altera dulcem.
Alterius flammam, longus restrinxerat usus;
Alterius, spes effrænisque libido sciendi
Foverat ardentem. Plorant utræque maritum.
Illa quidem luget, luget magis altera sponsum.
Deploranto. Viâ qua cœptum est pergimus ire.
Jam pede mille quater passus numeramus equino.
Et toties socium spatiis pes quilibet æquis

* Ordinatim, nam series fodinarum unde hauritur plumbum, paralellæ sunt, Anglicè vocantur *the Rakes*.
† Nam saxum quo plumbi venæ continentur, eâ est aliquando duritie quæ non nisi igne vincitur.
‡ Contigit pretereuntibus nobis, è duobus, qui ruinâ foveæ oppressi fuerant, unum extrahi, alterum quæri.
§ Fovearum spiracula. || Actis. ¶ Constringit, ut distineantur fovcæ latera.
** Quam ad opera damnaverat paupertas. †† Extrahi.

Hobbes's Poem.

Præteriens, terram alterno percusserat ictu.
Anteit umbra pedes, monstratque brevissima,* qua stat
Titan parte poli, & quam nos spectamus euntes.
Linquimus opidula hinc atque illinc plurima. Quorum
Postremum tantum Romane dicere †Spes est.
Cætera non referam impedientia nomina versum.
Per loca transversis longe lateque fodinis
Plena, soloque cavo, & pleno mortalibus intus,
Ingredimur‡ superi; medio tonat ungula campo
Festinantis equi; atque una, aut paulo amplius, hora,
Præcipitis ferimur subita ad declivia montis.
Pronum erat hinc vicum subjectum intrare cadendo.
Sed nobis ambage viam & cauto pede tritam
Ire placet, primumque ad dextras Sole recepto,
Et mox conversis lævo descendere eodem,
Paulatim, & pedibus nosmet concredere nostris.
Conscensis hic rursus equis, sub monte sinistro,
Intramus pagum qui summa in rupe locatum
Aspectare jubet,§ deducto nomine, Castrum.
Castrum non aliquo bellorum insigne labore;
Non magnum, non arcis opus spectabile; nostris
Impar tormentis, nec inexpugnabile priscis.
Antiquum tamen, & saxo super ædificatum,
Sustinet annorum, ventorum incommoda temnit.
Forsitan & Dominis sub plumbi-potentibus olim
Latronum potuit subitos arcere tumultus.
A Castro statim mons scissus detumet ambas
In partes; velut inclinato corpore nostro
In crura extantes deturgent utraque clunes.
In medio sinus est: atque erectissima utrinque
Rupes, quæ ingenti redituram pondere terram
Detinet, & tutis succedere ad intima præstat.
Jam ventum est (pudet effari)|| Plutonis ad anum,
(Ut vocitant plerique)—loci vocat incola, Peak's ars.
Nobile suspensis aperitur rupibus Antrum,
¶ Ignoto tibi, Phœbe, loco, sed segnibus Ursis
Obverso, & reliquis mergi metuentibus astris.
In speciemque patet furni, vel qualiter Orci
Ora perhorrifico pinguntur hiantia rictu
Post *Ite* auditum, turbam sorbentis abactam.
Sublimes intramus equis. Tecta intus, & altos
Suspicimus cumulos detonsi munera prati.
Sed** cœlum attoniti miramur saxeum; ut ingens
Sustineat montis nullo fulcimine pondus;
Laudamusque tuas, Æterne Geometer, artes.
Cernimus & denso colatam fornice lympham
Guttatim elabi, & solidâ tellure receptam,
Æquoream in patriam reditum jam nunc meditari;
Jam nunc exiguis properare canalibus, undas
Quærentem socias, & fortius ire parantem.
Jamque amnes ipsis videor didicisse magistris,
Non fieri, salsum terra potante liquorem
Littora ad ipsa maris, quasi celsis montibus ipse
Celsior Oceanus conclusam expelleret undam;

* Umbra brevissima, ante pedes projecta, arguit, & solem meridianum, & nos ad Aquilonem conversos. † Hope. ‡ Supra capita agentium subtus in cuniculis. § Castleton. || Orci culum, Ang. *The Divils Ars.* Mirab. 2. ¶ Quo nunquam pertingunt radii solares. ** Lacunar ingens.

Hobbes's Poem.

Sed mare Phœbæâ tenuatum surgere flammâ
In Cœlum; actumque Æoliis errare ministris;
Mox Phœbo fallente algens, totaque recepta
Natura, in terras fletu descendere; & esse
Flumina collectas lachrymas. Placet ima cavernæ
Umbrosæ, illatâ penetralia visere luce.
Descensos ab equis, antri virguncula civis
Præcedit, formosa satis, nimiumque puella;
Datque animos, gressusque regit jucunda* Celeustis.
Primumque ingressis† confuso lumine sensim
Accedunt cautes utrinque diemque recurvis
Extinguunt sinubus. Tum demittentia sese
Arcto‡ quadrupedes admittunt fornice saxa.
Erecto rursum rursum mox corpore prono
Pergimus, alterna pecudes hominesque figura.
Donec transverso tandem prohibemur ab amne.
Amnem quem clausum fert sub tellure canalis
Hactenus, hic humili patitur spirare sub arcu;
Exitque interdum non irrevocabilis unda.
Nunc speculatores propius, nunc longius arcens.
Huc nobis, ultra nulli licet ire. Nec est fas
Credere narranti vetulæ de patre, quod olim
Lychnorum ingressus librali fasce, fluentum
Tunc§ modicum tranavit, & ulteriora sequutus,
Tantum ivit, quantum licuit remeare|| timenti
Incidere in noctem. Remeamus, & altius ante
Signatis uda imprimimus vestigia arenis.
Exuimus noctem, diasque recepimus oras;
Cum emersis, ante ora, poli mons æmulus alti
Tollitur, avulso præceps ceu fragmine murus.
Defluere æternum perhibent a vertice terram,
Nec tamen imminui montem. Mirabile dictu.
Constaret si certa fides. Sed acutus arena
Labente, agnoscens tumulus, tacito indicat auctu,
Continuum hunc fluxum primum cæpisse ruina
Ingenii, æquatoque habiturum culmine finem.
Quemque vocant alii correpto nomine Mam-Tor
Rectius hunc clivum videor mihi dicere Maim'd-Tor
Quod sonat Angligenis Clivus Mutilatus, & ipse
Mons, nomen magnâ Mutilatus parte fatetur.
Progredimur versi ad lævam, duo millia passum
Ad septam muris, dictamque, sine arbore, Sylvam
Peccanam. Cervos nudis in montibus urit
Acris hyems, nullâ tectos a frigore fronde;
Sicca æstas, nullâ tectos a solibus umbrâ.
Sæva hominum, canibus sociis, lascivia multos;
Multos sæva necat varii inclementia cœli;
Et Fovea absorbet non magnam Eldenia partem.
Est ea terribilis scissæ telluris hiatus,
Quem dignè ut memorem veterum undique convoco frustra
Concilium, nam tale nihil finxere Poetæ:
Tentandum tamen; & primum quam formam habet oris
Musa refer; formæ simili componito. Magno

* Vox nautica hortatrix. † Misto ex cœlesti & lychnos. ‡ Nos, penè prostratos. Vetulæ ridicula narratio. § Facilius tranavit quia minime altum. Ridiculum. || Noctem timuit in speluncâ tenebrosissimâ, Ridiculum. *Mam-Tor.* Mirab. 3.

Hobbes's Poem.

Nam potes exemplo parvis componere magna.
Dic tandem; dic summissè soli mihi, in aurem:
Obticet* obscœnæ sibi conscia virgo figuræ.
In latere herbosi collis, pascentia circum
Distituens armenta solum, rimâque secundo
Monte patens, auras atro inbibit ore sequaces.
Quod procumbentes oculis de margine pronis
Cum inspicimus, vastum inspectantes terret inane,
Subjectumque horrens animus videt infinitum.
Et quamvis tutos jam securosque tueri
Continuo stantes hortentur marmore ripæ,
Non animis eadem spondentibus, ora Barathro
Demimus, & diro regnatis Dite tenebris,
At lapides toto sparsos conquirimus agro,
Verbere qui tandem per longa silentia missi
Quis sit eis doceant (si quis sit) finis eundi.
Missi subsidunt lapides, feriuntque cadentes
Cæcam (sed longo feriunt post tempore) rupem.
Inde docent decies repetito verbere lapsi,
Deceptos decies necquicquam quærere fundum.
Tum vero ardemus, si vis respondeat æqua,
Ingerere integras turres, & tecta, si adessent,
(Et non angusto tellus nimis ore negaret)
Tota simul, totosque altos ibi perdere montes.
Quod licet, immani defixum pondere saxum,
Vi multâ eruimus, pronâ & tellure volutum
Sistimus ad sacrum limen. Tum talia famur.
'Umbrarum præfecte Deus cruciatibus, ecce,
'Securi nostræ sortis, certique supernæ
'Jampridem sedis (ni nos tibi concolor author
'Fallat) tormentum jam inventis addimus unum.
'Pone sub hac rimâ, tibi si qua sit umbra rebellis,
'Insignisve fide violatâ. Subde Simonem,
'Aut Judam (Judam Iscarioten) subde Gigantes;
'Contriti fient Umbrarum protinus umbræ.
'At vos, O animæ, quibus incaluere retentis
'Cognita amicorum, dilectaque corpora nobis,
'Ferte pedem retro monitæ, & non temnite dicta.'
Sic fati, lapidem demittimus. Ille per auras
Stagnantes, densa mersus caligine fertur
In scopulum. Gemit horrendum percussa Caverna,
Collisæque cient altè suspiria moles.
Excussum primo, scopulus mox excipit alter,
Audito sonitu nobis minus, at magis Orco.
Territat arrectis jam stantes auribus umbras
Tertius, atque minis quartus propioribus ictus.
Quid moror? undeno† dentatum guttur Averni
Verbere dum transit, se & tunc lapis ire susurrat.
Post id quicquid iners aer vix auribus adfert,
Non sonus est, sed imago soni. Vento ocyus umbræ
Diffugiunt, Erebique tegi sub fornice certant.
Interea infernas percurrit in ordine Sphæras,
Descendens tacitè saxum. Confinia Ditis
Attingit,‡ vacua evertitque sedilia patrum.

* Est enim Foveæ os, formâ cunnoeides. † Exertis cautibus asperum.
‡ Nam Limbus Patrum jamdudum vacuus.

Hobbes's Poem.

Inde per intensum festinans labitur* ignem,
Candentesque animas (tubulorum more recoctas
Fictilium, quos, transmissâ fuligine, pinguis
Infecit Peti fumus) cœloque locandas.
Infantumque† semel natorum pervolat‡ orbem.
(Inscius admissi pœnam luit§ inscius, infans.)
Ultima tum subiens, infandaque Tartara, centrum
Transit (at hæsurum promiserat|| Entelechia,
Credenda umbra tamen) fundumque ascendit ad imum.
Et redeunt trepidi Manes residente favillâ;
Quos inter timet, & fert unus Sysiphus ægrè
Successisse suo graviori pondere saxum.
Fertur ad hoc antrum venisse Leicestrius heros,
Dudleius, notus Comes is regnantis Elizæ,
Ille inopem quendam parvo (sic credimus) ære
Conductum, & longo succinctum pectora fune,
Instructum conto, Pelleam imitante sarissam,
¶ Exploratores cophinoque ferente lapillos
Demitti, & mediâ jussit pendere cavernâ.
Inde jaci lapides, atque auribus aera pronis
Captari, inde cavum propius scrutarier altum.
Descendens pavidè miser, accedentia saxa
Nunc removet conto, nunc desiliente lapillo
Calculat immensum spatium, numeratque, quot ictus
Tot mortes; & fila timet pendentia vitæ,
Ne quis lascivus secet, injussuque Sororum.
Postquam bis centum sub terram circiter ulnas
Mersus substiterat, funemque tetenderat omnem,
Satque diu tenso de fune pependerat, antro
Extrahitur, cupido Heroi responsa daturus.
Verum, sive metus mentem expugnaverat ingens;
Sive celer motus torti vertigine funis
Immodicâ, solio rationem excusserat alto;
Sive Erebi, sive ipsa sui jam spectra timoris
Pallida terruerant; sive arcem mentis abactæ
Spiritus inferni possederat improbus Orci;
Haud dubiè furit infœlix. Sic lumina torva,
Mutatusque color, pallor, tremor, omnia monstrant.
Ergo ubi non cuiquam intellecta profuderat, & quæ
Æquabat magnis** sententia nulla Prophetis,
Conticuit, Manesque dies post octo†† revisit.
At Comes audito quo‡‡ pertinet usque Caverna,
Horruit, & (non hâc, neque nunc subiturus) abivit.
Hinc centum passus decies numeramus, & ecce,
In valle occultâ, radicibus exilit imis
Graminei collis, gemino§§ fons ore perennis.
Quem quoniam immensi mirandos æquoris æstus
Ludere in exiguâ fama affirmaverat undâ,
Visum est (quantumvis Phœbo properante) morari
Paulisper, si forte aquulæ miracula detur
Aspicere admotis, & famæ testibus esse.
Quæ vitreis ebullit aquis tremula unda, duarum
Major, splendidiorque, & poscens sola videri,

* Purgatorium. † Non regeneratorum. ‡ Limbum. § Pœnas, non sensit at damni. || Umbra Aristotelis. ¶ Quibus decidentibus exploraret foveæ altitudinem. ** Quia ea loqui quorum nulla est sententia, commune est vatum, insanientiumque. †† Mortuus est a Phrenesi. ‡‡ Pertingit, scilicet ad Inferos. §§ Fons æstuans, Mirab. 5.

Hobbes's Poem.

Excipitur puteo, structis non æquiparando,
Sed qui fortuito quovis ornatior ortu est.
Inde soluta fluit, nisi quæ fundo retinetur
Lata duos cubitos, tres longa, unumque profunda.
Unum dico suo quando contenta liquore
Subsidet, at binos quando hospite tollitur unda.
Labra reclinatæ signabat saxea ripæ
Linea, quam latices ipsi fecere tumentes,
Subnigris saxis modo detumuisse reperti.
Ergo cessatos iterum expectare labores
Tædet, & improbius visum est. Discedere prorsus
Admotis properamus equis. Jam jamque abeuntes
Concussis revocamur aquis. Liquidosque videmus
Attolli latices; sensimque irrepere saxis.
Jamque fere pleno saltabat fervida fonte
Lympha, velut rabidus cum subditur ignis aheno,
Nescia stare loco, refugit sævum unda metallum,
Cum juxta fontem, condicto rivulus ortu
Erumpit subitò, super infusoque liquore,
Præstat aquæ solitos auctæ contingere fines.
Quò perducta, iterum decrescit, & illico rivi
De super immissi restinguitur impetus, & quæ
Respuerat, repetit sitiens sua pocula Tellus.
Distracti laticis pars effluit altera ripis
Fontis; pertuso infertur pars altera fundo.
Furtaque muscosis erepta levissima saxis,
Graminaque & paleam & tenuis præsegmina chartæ,
Sive aliud quicquam parvâ superabile lymphâ
Injicimus, rediens infert in viscera terræ,
Jamque humili fonti, proprius vix constitit humor,
Cum redeunt fluctus; iterum ceu febre laborat
Unda instante tremens tota æstuat; auctaque lymphis
Externis iterum* tropicam contingere metam
Sufficit, accepto velans sua littora fluctu;
Atque iterum residet. Sed nos vetat† umbra morari,
Umbra giganteas mentita Colossica formas
Maturamus iter, sed quærimus inter eundum,
Conamurque, omni collato discere signo,
Abdita quæ tantum concivit causa tumultum.
Nam neque Salsedo, neque quid commune marinis,
His reperitur aquis; Phœbes nil imputat astro
Fons hic, temporibus nec tollitur (ut mare) certis;
Æstibus his nullam præfigit Ephemeris horam.
Ergo quid in causâ est? Paucis sic accipe. Prodit
Quæ tellure cavâ, fontique illabitur unda
Advena, non istuc proprio delata canali
Pervenit, atque volens alienos occupat ortus,
Sed dum ductricis sequitur vestigia lymphæ,
Longinquosque petit, per terræ viscera, fontes,
Intrat in angustis subeunda meatibus antra.
Huc quoties humor tumefactâ defluit undâ,
Præcipitique aditum comprendit flumine totum,
Protinus aura locum conclusa tuetur; aquisque
Pernegat ingressum, nec habens quo cedere, pugnat.
Utque est deprensâ nihil obfirmatius aurâ,

* Quo provecta solebat decrescere. † Solis jam occidentis.

Hobbes's Poem.

Sustinet urgentes exili corpore lymphas,
Tum, conferta velut si portis irruat arctis
Turba, hærent, ipso defixi in limine, primi;
Quæ sequitur stat pro foribus stipata caterva,
Parsque urget socios, alias dilabitur & pars
Quæsitura vias: exclusus defluus humor
Intumet, impatiensque moræ, expatiatur, & errans
Fertur in hunc fontem, lentarum impulsor aquarum.
Hinc fit post magnos guttis pluvialibus imbres
Transmissis, æstus fieri crebros, & in horas,
Fluctum (ut nunc) vicibus tolli, & subsidere ternis.
Sed post continuis tellurem ardoribus ustam,
Vix semel in toto cerni hæc miracula mense.
Jam nostros fugiens visus, auriga diei
Antipodas tota lustrabat lampade; nobis
Languida succensæ præbebant lumina nubes.
Et simul ad celebrem tepidis deponimur undis
Buxtonam. Divæ sacer est fons inclytus Annæ:
Ambas miscet aquas calidæ gelidæque ministra
Tellus; sulphureisque effundit pharmaca venis.
Hæc resoluta senum confirmat membra trementum,
Et refovet nervos lotrix hæc lympha gelatos.
Huc infirma regunt baculis vestigia claudi;
Ingrati referunt baculis vestigia spretis.
Huc, mater fieri cupiens, accedit inanis,
Plenaque discedit puto, nec veniente marito.
Excipitur, ferme quadrato fonte, serena
Nascens unda, & quinque pedes vehit alta natantes.
Spectator muris, & tecto excluditur imber.
Hospitioque eadem gratissima balnea nostro
Conjungit foribus paries communis apertis.
Ergo placet, coquitur dum cespite cæna cremato,
Defessos lymphis refovere tepentibus artus.
Protinus exuti, nitidis illabimur undis,
Nudaque perspicuis velamus corpora lymphis.
Nunc facie prona namus; nunc nare supini
Tentamus. Bibimus.* Nec enim omnia possumus omnes.
Postquam vexatis per totam fluctibus horam
Lusimus; egressi siccis lodicibus udi
Induimur. Mox quisque suo vestimur amictu,
Vestitos stratis expectat cœnula mensis.
Nox atra interea simul evolat omnibus antris.
Et victrix tenebris involverat omnia cæcis,
Donec succensis infertur cœna lucernis. *Cœnula.*
Jam nobis lixæ non integra balnea ovillæ,
Sed modicum juris,† consultis ponitur. Ipsa *Jus.*
Tum caro‡ conditis thermis educta, seorsim.
Atque ovis ejusdem fumans a cuspide§ lumbus.
Et nuper rupto gallinæ‖ filius ovo.
Pisaque quæ nobis converrat cochlear uncta. *Pisa.*
Ditia cùm frustra quærantur pocula Bacchi,
Ollâ subridens bibitur cervisia nigrâ.
Cœnati peto somnos arcessimus hausto.
Postera Phœbæos ducens Aurora triumphos

* Indocti nare, aquam imbibimus. † Interrogatis, an apponi placeret. ‡ Ovilla elixa, jusculo extracta.
§ Ovillæ assatæ. ‖ Pullus.

Hobbes's Poem.

Nondum vulgares Cælo dimoverat ignes,
Cùm somno excusso tepidis immergimur undis
Rursus, & inficimur penitus medicante liquore
Jam dibaphi; atque iterum rorantia corpora lectis
Reddimus, & nonâ de somno surgimus horâ.
Unica restabat, verum dignissima visu,
Haud procul hinc Spelunca Poli, sic dicta Caverna.
Insignis latro Polus, &, si credere famæ
Debemus, furi par Caco, & forte coævus.
Hac usus latebra consuevit vivere rapto;
Atque viatores spoliandos ducere in antrum.
Verum & ei solenne fuit conjungere furtis
Cædem; sic texit scelera authoremque Caverna.
Hanc inspecturi penitus, ductore perito
Cæcarum assumpto imâ sub tellure viarum,
Eximus, pedites collem petimusque virentem,
Distantem nostrâ vix passus, mille tabernâ.
Ipsas ad montis radices, concava tellus
Prostratis aditum pertusa foramine præbet
Exiguo, minus at præmissis invia* plantis.
Omnes cancrino gressu, sumptâque lucernâ
Quisque suâ, tandem transmittimur, erigimurque
Antrum, horrendum, informe, ingens aperitur. Et atra
Divisa in partes nox dissilit atrior ambas.
Asperaque apparet Latronis, & horrida Saxis
Regia. Percussum rutilo micat igne lacunar.
Progredimur. Pedibusque admoto lumine caùtis,
Saxa ingentia, roscida, lubrica, & ardua scansu,
Libera, corruitura semel, nunc ergo timenda,
Saxosæque feros montes vallesque Cavernæ
Transimus; fluviumque suas qui dissipat undas
Cæcus in objectas impingens murmure rupes.
Qui scandet rauco surgentem a flumine montem,
Ille licet sudetque pedesque manusque fatiget,
Dissita ab introitu stadiis tribus, ultima opaci
Pertinget (multo nobis audacior) Antri.
Speluncam hanc credas habitatam Gorgone primùm
Anguicomâ, & versa in rigidum sic omnia saxum,
Nam lapis est, quodcunque vides. Laqûearibus altis
Quæ sicci tibi terga Suis pendere videntur,
Dentibus haud cedent. Durum sunt utraque saxum.
Non est ille Leo, Leo, quamvis erigat hirta
Colla juba, sedeatque antri ferus incola cæci,
Sed fulvus lapis. Ille Senex qui rupibus aspris
Innisus recubat cubito, pars rupis & ipse est.
Quæque lacunari scintillant Astra micante,
Sunt nitidi illotâ gemmantes luce lapilli:
Guttaque quæ saxi mucro nunc pendet acuti,
Numquid & illa lapis? lapis illa vel est, vel erit mox:
Admoti exceptam digito deprendimus esse
Nec lapidem, nec aquam, verum media inter utrumque
Natura, qualique tenax humore farina.
Detinet intentos dum† transfuga lympha, lucernæ,
Curtæ perplexâ suadent exire Cavernâ.
Sed prius ad lævam remeantes, undique saxo

* Pedibus. † Transfugiens à naturâ aqueâ ad saxeam.

Hobbes's Poem.

Obductum plano, furis, nulloque madentem
Rore, Poli thalamum, lecti, lasanique capacem,
Inspicimus. Superis tum demum reddimur oris.
Jam tepido fessos sudore rigaverat artus,
Scandendique gravis labor, & formido cadendi.
Reptantumque manus obleverat humida tellus.
Verum ante ora specus turba officiosa, lavandis
Præbebat manibus permistam floribus undam.
Scilicet exigitur tacitè pro munere nummus.
Recte. Namque hærent sordes ut cunque lavemur
Ni (quamquam levicis) referatur gratia donis.
Omnia jam Pecci Miracula vidimus Alti,
Buxtonamqûe iterum perlatis, & citò pransis
Adducuntur equi, nos qui inter nubila vectos,
Sollicitè que decem numerantes millia passûm,
Per non insignes Chelmarton, Sheldon, & Ashford,
Ad Chatsworth referunt celerem Deroentis ad undam.

(No. 3.)

*A List of the High-Sheriffs for the County of Derby.**

HENRY VI.

1423 Sir John Cockayne, of Ashbourn, knight
24 Sir Thomas Chaworth, of Wiverton, Nottinghamshire, knight
25 Sir Richard Vernon, of Haddon, knight
26 Sir John le Zouch, of Harringworth, knt.
Dreadful earthquake in England
27 Sir Thomas Griesly, of Griesly, knt.
28 Norm. Babington, of Dethick, esq.
29 Sir John Cockayne, of Ashbourn, knt.
30 John Cockfeld, esq.
31 Sir Hugh Willoughby, of Risley, knt.
32 Sir Nicholas Montgomery, knt.
33 William Mereing, esq.
34 Sir Robert Markham, knt.
Great frost
35 Sir John Cockayne, of Ashbourn, knt.
36 Thomas Darcy, of Newhall, esq.
37 John Curzon, of Kedleston, esq.
38 John Hickling, esq.
A famine in England
39 William Mereing, esq.
40 John Cockfeld, esq.
41 Thomas Stanton, esq.
42 J. Walbeys, esq.
43 J. Pole, of Radborne, esq.
44 Thomas Nevil, esq.
45 J. Stathum, esq.
46 Robert Strelley, esq.
47 Thomas Blount, esq.
48 Nicholas Fitz Herbert, of Norbury, esq.
49 Thomas Stanton, esq.
50 Richard Willoughby, esq.
51 Robert Clifton, of Clifton, Nottinghamshire, esq.
52 Robert Strelley, esq.
53 Sir William Plumpton, knt.
54 Sir John Griesly, of Griesly, knt.
55 John Stanhope, of Shelford, Notts. esq.
56 William Babington, esq.
57 John Wastneis, of Hendon, esq.
58 W. Chaworth, of Wiverton, Notts. esq.
1459 William Fitz Herbert, of Norbury, esq.
60 Robert Clifton, of Clifton, Notts. esq.

EDWARD IV.

61 Richard Willoughby, esq.
62 Sir John Stanhope, of Shelford, Notts.
63 Ditto
64 Sir Robert Strelley, knight
65 Sir Philip Oker, of Oakeover, knight
66 Nicholas Fitzherbert, of Norbury, esq.
67 Nicholas Kniveton, of Mercaston, esq.
68 Sir Robert Clifton, of Clifton, knight
69 Sir H. Perpoint, of Holm Perpoint, knight
70 William Blount, esq.
71 Sir H. Perpoint, of Holm Perpoint, knight
Printing first brought into England by William Caxton
72 Gervas Clifton, esq.
73 John Curzon, of Kedleston, esq.
74 Philip Oker, of Okeover, esq.
75 Sir Henry Statham, of Morley, knight
76 William Basset, of Brailsford, esq.
77 Rad. Pole, of Radborne, esq.
Plague in London, 38,000 persons died
78 Gervas Clifton, esq.
79 John Babington, of Dethick, esq.
80 Sir Robert Markham, knight
81 Robert Eyre, esq.
82 Car Pilkington, esq.

RICHARD III.

83 Sir Gervas Clifton, knight
84 John Curzon of Kedleston, esq.

HENRY VII.

85 Nicholas Montgomery, esq.
86 Sir John Byron, knight
87 John Curzon, of Kedleston, esq.
88 Gervas Clifton, esq.
89 John Leek, of Sutton, Derbyshire, esq.
Plague in London
90 Nich. Kniveton, sen. of Mercaston, esq.

* The assizes for the counties of Derby and Nottingham, were held at Nottingham till the reign of Henry III. From this time to the year 1566, they were held at Derby and Nottingham alternately. At the latter period an Act was passed for allowing a sheriff to each county.

1491 —— ——
92 Sir Jacobus Savage
93 Nicholas Byron, esq.
Wheat 4*s.* a quarter
94 Nich. Kniveton, jun. of Mercaston, esq.
Algebra first known in England
95 Bri. Stamford, esq.
96 Sir Henry Willoughby, of Risley, knight
97 Sir Rad. Shirley, of Shirley, knight
98 Thomas Babington, of Dethick, esq.
99 William Bothe, esq.
1500 Humphry Hercy, esq.
1 Sir Ralph Longford, knight
2 Sir Gervas Clifton, knight
3 William Perpoint, esq.
4 Sir Henry Vernon, knight
5 Simon Digby, esq.
6 Sir William Mereing, knight
7 Ditto
8 Sir Edward Stanhope, knight
9 Ditto

HENRY VIII.

10 Sir Br. Stapulton, knight
11 William Zouch, esq.
12 Richard Basset, esq.
13 George Chaworth, esq.
14 Roger Minors, esq.
15 Sir William Mereing, knight
Coaches first used in England
16 Sir John Zouch, knight
17 Robert Brown, esq.
18 Sir Br. Stapulton, knight
19 Sir John Markham, knight
20 Sir Godfrey Foljambe, knight
21 Sir John Cockayne, knight
22 Sir William Perpoint, knight
23 John Vernon, esq.
24 Sir John Vernon, knight
25 Sir Godfrey Foljambe, knight
26 Sir John Markham, knight
27 John Vernon, esq.
28 Sir John Byron, knight
29 Nicholas Sirelley, esq.
30 Sir Thomas Cockayne, knight
31 Sir Henry Sacheverel, knight
32 William Cosfin, esq.
33 John Hercy, esq.
34 Sir Anthony Babington, knight
35 —— ——
36 Sir Rad. Langford, knight
37 Sir Godfrey Foljambe, knight
38 Sir Nicholas Strelley, knight
39 Sir John Markham, knight
40 Sir William Basset, knight
41 Sir Gervas Clifton, knight
42 Sir Henry Sacheverel, knight
43 Sir John Byron, knight
44 John Hercy, esq.
45 John Zouch, esq.
46 Sir John Markham, knight

EDWARD VI.

47 Sir Gervas Clifton, knight
48 Francis Leek, esq.
Plague in London
49 Sir John Hercy, knight
50 Sir Thomas Cockayne, knight
51 Sir Henry Sutton, of Arundel, knight
52 Sir John Byron, knight
53 Sir Anthony Nevil, knight

MARY.

54 Sir John Port, of Etwall, knight
55 Sir George Clifton, knight
56 Sir James Foljambe, knight
57 Sir John Chaworth, of Wiverton, knight

ELIZABETH.

58 Sir William Hollis, of Houghton, knight
59 Sir Gervas Perpoint, knight
60 Sir Thomas Cockayne, of Ashborne, knight
Peace with Scotland
1561 Sir William Merry, of Barton park, knight
62 Sir John Zouch, of Codnor, knight
War with France
63 Thomas Stanhope, of Elvaston, esq.
64 Sir Humphry Bradbourn, of Hough, knight
Peace with France
65 Francis Molyneux, of Taversal, esq.
66 Sir Thomas Gerrard, of Hilderstone, knight
67 Godfrey Foljambe, of Aldwark, esq.
68 Francis Curzon, of Kedleston, esq.
69 Sir Thomas Cockayne, of Ashborne, knight
70 Ditto
War with Scotland
71 Sir Peter Fretcheville, of Staveley, knight
72 Sir John Zouch, of Codnor, knight
73 Sir Francis Leake, of Kirk-Hallam, knight
74 Sir Humphry Bradbourn, of Hough, knight
75 German Pole, of Radborne, esq.
76 John Manners, of Nether-Haddon, esq.
77 Francis Wortley, of Wortley, esq.
78 William Basset, of Blore, esq.
79 Godfrey Foljambe, of Aldwarke, esq.
80 Sir Thomas Cockayne, of Ashborne, knight
81 Sir John Zouch, of Codnor, knight
82 John Harpur, of Calke, esq.
83 Ditto
A frost continued thirteen weeks
84 Francis Curzon, of Kedleston, esq.
85 John Manners, of Whitwell, esq.
86 Godfrey Foljambe, of Walton, esq.
87 Humphry Dethick, of Dethick, esq.
88 Thomas Gresley, of Drakelow, esq.
War with Spain—armada destroyed
89 William Basset, of Blore, esq.
90 Francis Cockayne, of Ashborne, esq.
91 John Rhodes, of Barlbrough, esq.
92 William Cavendish, of Doveridge, esq.
93 George Curzon, of Kedleston, esq.
94 John Manners, of Nether-Haddon, esq.
Plague in London, which carried off a fourth part of its inhabitants
95 Henry Sacheverel, of Morley, esq.
96 John Willoughby, of Risley, esq.
97 Edward Cockayne, of Ashborne, esq.
98 Francis Fitzherbert, of Norbury, esq.
99 Ditto
Rebellion of the Irish under Tyrone
1600 Sir Francis Leake, of Kirk-Hallam, knight
1 Ditto
2 Sir John Fitzherbert, of Tissington, knight
3 Sir Thomas Gresley, of Drakelow, knight
Queen Elizabeth died March 24

JAMES I.

4 Henry Willoughby, of Risley, esq.
Peace with Spain, August 18.—Plague in London carried off one fourth of its inhabitants.
5 Sir Peter Fretcheville, of Staveley, knight
Gunpowder plot
6 Sir John Harpur, of Swarkstone, knight
7 Sir Richard Harpur, of Littleover, knight
8 Henry Cavendish, of Doveridge, esq.
9 John Curzon, of Kedleston, esq.
10 Thomas Burdett, of Foremark, esq.
11 Sir George Fullwood, of Middleton, knight
12 Sir Henry Leigh, of Egginton, knight
13 Sir Thomas Reresby, of Ashover, knight
14 Sir William Kniveton, of Norton, knight
15 Henry Agard, of Foston, esq.
16 John Bullock, of Darley Abbey, esq.
17 Francis Mundy, of Markeaton, esq.
18 Sir Roger Manners, of Whitwell, knight
19 Godfrey Thacker, of Repton, esq.
20 John Millward, of Broadlow Ash, esq.
21 Thomas Eyre, of Hassop, esq.
22 Jacinth Sacheverel, of Morley, esq.
23 Henry Hunloke, of Wingerworth, esq.
He died, and Sir Gilbert Kniveton, of Bradley, served the year out
24 Sir John Fitzherbert, of Tissington, knight
His father was sheriff at the death of the queen and coronation of king James I. He at the death of king James I. and coronation of king Charles I.—War with Spain

1625 Henry Harpur, of Calke, esq.
King James I. died March 27—Plague in London, where died 35,417 persons

CHARLES I.

26 Sir John Fitzherbert, of Norbury, knight
27 Sir Edward Vernon, of Sudbury, knight
War with France
28 Thomas Burton, of Holmsfield, esq.
29 Sir John Stanhope, of Elvaston, knight
Peace with Spain and France, April 24
30 Francis Bradshaw, of Bradshaw, esq.
31 Humphry Oakover, of Oakover, esq.
32 John Manners, of Nether-Haddon, esq.
33 Sir Francis Foljambe, of Walton, knight
34 John Gell, of Hopton, esq.
35 John Milward, of Snitterton, esq.
36 Sir John Harpur, of Swarkstone, knight
37 Sir John Curzon, of Kedleston, bart.
38 John Shalcross, of Shalcross, esq.
39 John Agard, of Foston, esq.
Scots rebellion
40 Christopher Horton, of Catton, esq.
41 Sir John Harpur, of Calke, bart.
The Irish massacre
42, 43, 44 Civil wars; no sheriffs
45 Sir George Griesley, of Drakelow, bart.
46 Sir Edward Coke, of Longford, bart.
Mr. Edward Newton, treasurer of the county. Tents made for the judges
47 Michael Burton, of Holmsfield, esq.
48 Samuel Sleigh, of Ash, knight
49 Anthony Morewood, of Alfreton, esq.
50 Sir Francis Burdett, of Foremark, bart.
51 John Stanhope, of Elvaston, esq.
War with the Dutch
52 Godfrey Clark, of Somersall, esq.
53 George Sitwell, of Renishaw, esq.
Oliver Cromwell made Protector, December 12

COMMONWEALTH.

54 William Leech, of Shipley, esq.
Peace with the Dutch, April 5
55 J. Ferrers, of Walton, esq.
Spanish war
56 James Abney, of Willesley, esq.
57 Walter Horton, of Catton, esq.
58 Robert Eyre, of Highlow, esq.
Oliver Cromwell died September 3, and his son Richard was chosen
59 John Mundy, of Markeaton, esq.
Richard Cromwell deposed, April 22
60 Ditto
King Charles II. restored, May 29—Peace with Spain, September 10

CHARLES II.

61 Charles Agard, of Foston, esq.
62 Sir William Boothby, of Broadlow Ash, bart.
63 Sir Thomas Gresley, of Drakelow, bart.
64 George Vernon, of Sudbury, esq.
65 Robert Ashton, of Stoney Middleton, esq.
Plague in London, 68000 persons died
66 Sir Samuel Sleigh, of Ash, knight
War with France and Denmark—Rebellion of the Scotch
67 Edward Pegge, of Beauchief, esq.
Peace with the French, Danes and Dutch
68 Thomas Gladwin of Tupton, esq.
Peace with Spain, February 13
69 Francis Burton, of Dronfield, esq.
War with the Algerines, September 6
70 Cornelius Clark, of Norton, esq.
71 Adrian Mundy, of Quorn, esq.
Peace with the Algerines
72 Francis Sitwell, of Renishaw, esq.
He died November 22, and Robert Wilmot, of Chaddesden, esq. chosen, who died February 12, and Sir Robert Coke, of Longford, bart. served the year out—War with the Dutch
73 Sir John Gell, of Hopton, bart.
74 Samuel Hallows, of Norton, esq.
Peace with the Dutch, February 28
75 Sir Simon Degge, of Derby, knight
1676 Sir Gilbert Clark, of Somersall, knight
77 John Morewood, of Alfreton, esq.
78 Henry Keys, of Hopwell, esq.
79 John Lowe, of Alderwasley, esq.
80 Henry Milward, of Snitterton, esq.
81 Henry Balguy, of Derwent, esq.
82 Godfrey Meynell, of Bradley, esq.
83 William Allestrey, of Walton, esq.
84 Reginald Pinder, of Duffield, esq.

JAMES II.

85 Matthew Smith, of Denby, esq.
Rebellion under Monmouth
86 John Shalcross, of Shalcross, esq.
87 Sir Paul Jenkinson, of Walton, bart.
88 John Borrow of Hulland, esq.
Seven bishops sent to the tower

WILLIAM AND MARY.

89 Robert Wilmot, of Osmaston, esq.
War with France, May 7
90 Edward Finey, of Coates park, esq.
91 William Eyre, of Holme, esq.
92 Sir Nathaniel Curzon, of Kedleston, bart.
93 James Chetham, of Etwall, esq.
94 Francis Mundy, of Markeaton, esq.
95 Samuel Pole, of Radborne, esq.
96 John Bagshaw, of Hucklow, esq.
97 Gilbert Mundy, of Allestree, esq.
A general peace
98 Sir Charles Skrimsher, of Chesterfield, knight
99 George Saville, of Hill-top, esq.
1700 Robert Revell, of Carnfield, esq.
1 Henry Bradshaw, of Marple, esq.

ANNE.

2 Sir John Harpur, of Calke, bart.
War with France, May 4
3 Henry Coape, of Duffield, esq.
A terrible storm, November 3, which unroofed houses, tore up whole groves of trees by the roots; nine men-of-war and several smaller vessels were cast away, and upwards of 1500 seamen lost. In London only, the damage was estimated at a million
4 Sir William Gresley, of Drakelow, bart.
5 Richard Bate, of Foston, esq.
6 Francis Burton, of Weston-under-Wood, esq.
7 Rowland Morewood, of Alfreton, esq.
The union with Scotland
8 Francis Pole, of Park-hall, esq.
9 George Sacheverel, of Calow, esq.
10 John Harpur, of Twyford, esq.
11 Thomas Stubbing, of West-Broughton, esq.
12 Sir Streynsham Master, of Codnor, knight
13 Brook Boothby, of Ashborne, esq.
Peace of Utrecht, July 13

GEORGE I.

14 Charles Hurt, of Alderwasley, esq.
15 Robert Greensmith, of Wirksworth, esq.
Rebellion—A great frost
16 Stephen Offley, of Norton, esq.
17 John Bradshaw, of Brampton, esq.
18 Sir John Every, of Egginton, bart.
Spanish war
19 Samuel Burton, of Derby, esq.
20 Richard Milnes, of Ollercar, esq.
21 Richard Bagshaw, of Castleton, esq.
Peace with Spain, October 19
22 John Bright, of Chesterfield, esq.
23 Henry Eyre, of Rowter, esq.
24 Sir Thomas Gresley, of Drakelow, bart.
25 Leonard Fosbrooke, of Shardlow, esq.
26 Wigley Statham, of Wigwall, esq.

GEORGE II.

27 William Taylor, of Walton, esq.
28 Richard Harpur, of Littleover, esq.
29 John White, of Risley, esq.
30 Rowe Port, of Ilam, esq.
31 Edward Mundy, of Allestree, esq.
32 John Fletcher, of Stainsby-house, esq.

1733 German Pole, of Radborne, esq.
34 George Mower, of Woodseats, esq.
35 Francis Sitwell, of Renishaw, esq.
36 Godfrey Watkinson, of Brampton, esq.
37 Wrightson Mundy, of Osbiston, esq.
38 Sir Robert Burdett, of Foremark, bart.
39 Strelley Pegge, of Beauchief, esq.
Frost which lasted nine weeks—War declared against Spain, October 23
40 Godfrey Clark, of Chilcote, esq.
41 Henry Cavendish, of Doveridge, esq.
42 John Gisborne, jun. of Derby, esq.
43 William Brown, of Stretton, esq.
44 William Roberts, of Derby, esq.
War with France, March 31
45 John Taylor, of Hartshorn, esq.
46 Robert Newton, of Norton, esq.
47 T. Richards, of Ashby-de-la-Zouch, esq.
48 John Harpur, of Littleover, esq.
Peace with France, &c. October 18
49 Henry Every, of Egginton, esq.
50 John Rotherham, of Dronfield, esq.
Prince of Wales died March 20
51 Sir Thomas Gresley, of Drakelow, bart.
52 John Lowe, of Locko, esq.
Old Style ceased, September 2, and next day was accounted 14 New Style
53 Goodere Fletcher, of Heanor, esq.
54 Richard Fitzherbert, of Somersal, esq.
55 Philip Gell, of Hopton, esq.
56 Nicholas Hurt, of Alderwasley, esq.
War with France
57 Thomas Rivett, of Derby, esq.
58 Hugo Meynell, of Bradley, esq.
59 Gilbert Cheshire, of Lees, esq.

GEORGE III.

60 Thomas Bainbrigge, of Derby, esq.
61 Samuel Shore, of Norton, esq.
62 George Morewood, of Alfreton, esq.
63 Thomas Holland, of Ford, esq.
Peace with France and Spain, February 10
64 Leonard Fosbrook, of Shardlow, esq.
65 Joseph Greaves, of Aston, esq.
66 Edward Sacheverel Pole, of Radborne, esq.
67 John Twigge, of Holme, esq.
68 Samuel Crompton, of Derby, esq.
He was mayor of Derby at the same time
69 Brabazon Hallows, of Glapwell, esq.
70 Peter Nightingale, of Lea, esq.
71 William Milnes, of Cromford, esq.
72 Francis Noel Clark Mundy, of Markeaton, esq.
73 Samuel Rotheram, of Dronfield, esq.
74 Sir Henry Harpur, of Calke, bart.
75 Robert Cheyney, of Langley, esq.
At this summer assizes a bill of indictment was found by the grand jury against Matthew Cocklane, a prisoner in the castle of Dublin, for the inhuman murder of Mrs. Vicars, of the borough of Derby
76 Bache Thornhill, of Stanton, esq.
77 Joseph Baggaley Bradshaw, of Holbrook, esq.
78 Francis Hurt, jun. of Alderwasley, esq.
79 Edward Sacheverel Sitwell, of Stainsby, esq.
80 Nigel Bowyer Griesley, of Drakelow, esq.
81 Samuel Frith, of Bank Hall, esq.
82 Richard Lowe, of Locko, esq.
83 Sir Edward Every, of Egginton, bart.
84 John Radford, of Smalley, esq.
Establishment of mail coaches
85 Herbert Greensmith, of Priory, esq.
Sixteen weeks' frost
86 Robert Dale of Ashborne, esq.
87 Sir Richard Arkwright, of Cromford, knight
Knighted on presenting an address, December 22, 1786, died 3rd of August, 1792
88 Peter Pegge Burnell, of Beauchief, esq.
89 Martin Farnell, of ———, esq.
Revolution in France
1790 Thomas Wilson, of Derby, esq.
91 John Broadhurst, of Duffield, esq.
92 Hugh Bateman, of Shardlow, esq.
93 Sacheverel Pole, of Radborne, esq.
King and queen of France guillotined
94 Sir Henry Harpur, of Calke, bart.
95 William Drury Lowe, of Locko park, esq.
96 Sir Robert Wilmot, of Osmaston, bart.
97 Charles Hurt, of Wirksworth, esq.
Ireland invaded by the French
98 John Leaper Newton, of Derby, esq.
99 Joseph Walker, of Aston, esq.
Bonaparte appointed consul
1800 Eusebeus Horton, of Catton, esq.
1 Richard Arkwright, of Willersley, esq.
Ireland united to Great Britain—A general peace
2 Thomas Princep, of Croxall, esq.
3 Sir Robert Wilmot, of Chaddesden, bart.
War with France renewed
4 Sir Henry Every, of Egginton, bart.
Bonaparte made emperor
5 William Chambers Bagshaw, of the Oakes, esq.
Battle of Trafalgar—Death of Nelson
6 Francis Bradshaw, of Barton park, esq.
Right Hon. William Pitt died
7 Sitwell Sitwell, of Renishaw, esq.
Right Hon. Charles James Fox died
8 Marm. Middleton Middleton, of Leam, esq.
9 Charles Upton, of Derby, esq.
10 John Crompton, of Derby, esq.
11 Godfrey Meynell, of Langley, esq.
12 Robert Bateman, of Foston, esq.
Bonaparte's expedition to Russia—Moscow burnt
13 Robert Holden, of Darley Abbey, esq.
14 Francis Hurt, of Alderwasley, esq.
Bonaparte abdicated—royal visitors in London
15 Sir Henry Fitz Herbert, of Tissington, bart.
Conspiracy in France—Bonaparte's return from Elba—battle of Waterloo—and his exile to St. Helena
16 John Peel, of the Pastures, esq.
17 Thomas Hallowes, of Glapwell, esq.
Princess Charlotte died, and the intelligence of her death was received in Derby on the 7th of November, being the day on which Brandreth, Turner and Ludlam were decapitated for high treason at Derby
18 John Charles Girardot, of Allestree, esq.
Queen Charlotte died
19 Edward Coke, of Longford, esq.
20 Francis Mundy, of Markeaton, esq.
George III. died, January 29—proceedings against queen Caroline commenced, August 17—bill of Pains and Penalties defeated, November 10—Steam boats established generally through the United Kingdom

GEORGE IV.

21 Sir George Crewe, of Calke Abbey, bart.
Bonaparte died May 5—gold sovereigns issued —George IV. crowned, July 19—queen Caroline died, August 7
22 Philip Gell, of Hopton, esq.
Marquis of Londonderry's death by suicide, August 12
23 Thomas Bateman, of Middleton by Yolgrave, esq.
24 Samuel Oldknow, of Mellor, esq.
Parliament granted £500,000. for building additional churches—London University established
25 Sir Charles Abney Hastings, of Willersley, bart.
Mechanics' Institutions generally established
26 Sir Roger Gresley, of Drakelow, bart.
27 Edward Sacheverel Chandos Pole, of Radborne, esq.
Right Hon. George Canning died
28 Sir George Sitwell, of Renishaw, bart.

(No. 4.)

Names of the Knights of the Shire, for the County of Derby, from the 13th Century, to the present time.

At what particular time Derbyshire was first represented in parliament, has not been discovered with certainty. But there is no doubt, but that it sent two knights thither as early as the twenty-third of Edward I. The time allowed by the writs of expenses, in repairing to, and returning from, great councils and parliaments, at the places where they were generally held, was, at Cambridge, two days; Coventry one; York two; Gloucester three and four; Leicester one; London and Westminster four; Northampton two; Nottingham one; Sarum four and five; and Winchester four and five. The first column shows the time of representation; the second the place where the parliaments and councils were held; and the third the persons who were chosen. The following is a catalogue* of those who have enjoyed this honour from so remote a period to the present day.

Parl.		EDWARD I.
23	Westmin.	Hen. de Kniveton, Giles de Meynell
25	London,	Robert Dethick, Thomas Foljambe
26	York,	H. de Braillsford, H. Fitz-Herbert
28	London,	Geffry de Gresley, Rob. de Frechville
28	Lincoln,	Ralf de Frechevile, Geffrey de Gresley
29	Lincoln,	Ralf de Frechevile, Geffrey de Gresley
30	London,	Thomas Folejambe, Robert de Toks
33	Westmin.	Henry Folejambe, William Faunel
34	C. West.	Rob. de Dethick, Giles de Meynell
35	Carlisle,	*Ledula Amissa*

		EDWARD II.
1	Northam.	Ralf Frecheville, William Faunell
2	Westmin.	Thomas Folejambe, —— ——
4	London,	William Faunell, Thomas Folejambe
5	Westmin.	William Resoll, William Faunell
6	Westmin.	Ralf de Frechevill, —— ——
8	York,	William Faunell, Thomas Folejambe
8	Westmin.	Robert Staunton, John Twyford
9	Lincoln,	John Beaufay, Robert de Staunton
10	C. Linc.	Robert de Staunton, John Deynecourt
12	York,	John de Twyford, Ralf de Cromwell
12	York,	John Deyncourt, John de Twyford
17	Westmin.	Hugh de Meignell, Nic. de Langeford
18	Westmin.	Ralf de Reseby, William Rosell
19	Westmin.	William Rosell, John de Beausey

		EDWARD III.
1	Westmin.	Thomas de Stanton, Will. Michell
1	Lincoln,	Will. de Samperton, Simon de Cestre
1	Westmin.	Will. Michell, R. Ingram de Etewell
2	Westmin.	John de Beaufay, William Michel
2	N. Sarum.	Robert de Maynhull, John Beaufay
4	Westmin.	Edm. de Appelby, John de Verdon
4	Winchest.	Rob. de Maignel, Hugh de Maignel
5	Westmin.	Hugh Fitz-Hugh de Meynhul, Roger de Okerore
6	Westmin.	Robert de Meignill, William Michel
6	Westmin.	Hugh de Meignill, Rob. de Meignill
6	Westmin.	R. de Meignill, Peter de Wakebrigg
7	York,	Will. de Saperton, Simon de Cestre
7	York,	R. de Meignil, Peter de Wakebrigg
8	Westmin.	Rob. de Ingram, John de Hambury
8	York,	Will. de Saperton, Simon de Cestre
9	York,	Henry de Kniveton, John Cockeyn
10	Council at Nottingh.	Peter de Wakebrigge, Hugh de Muskham
11	Westmin.	William Michel, —— Adam
11	Westmin.	Giles de Meynill, Robert Franceys
11	Westmin.	Giles de Meynill, John Cockayn
12	Westmin.	Giles de Meynill, Robert Franceys
12	Council at Northamp.	John Cokeyn, Godfrey Folejaumbe
12	Westmin.	John Deyncourts, John de Twyford
13	Westmin.	John Cokynn, Thomas Adam
13	Westmin.	John Cokayn, Roger de Chester
14	Westmin.	Godfrey Folejambe, John Cokayn
14	Westmin.	Robert Ingram, Robert Gresleye
14	Westmin.	Robert Ingram, —— ——
14	Westmin.	Rob. Touks, John Beausey
15	Westmin.	John Cockeyn, Robert de Irland
17	Westmin.	Thomas Adam, Robert Asheburn
18	Westmin.	John Cokayn, John Foucher
20	Westmin.	Giles de Meignill, Roger de Emerton
20	Westmin.	Will. de Ashewell, John de Chelaston
21	Westmin.	Roger de Enyton, Robert de Ashburn
22	Westmin.	John de Rochford, John de Chelaston
22	Westmin.	Rog. de Enynton, Rob. de Ashebourn
24	Westmin.	John Cockeyn, John Foucher
25	Westmin.	John Cockeyn, John Foucher
26	Westmin.	Roger de Padley, Will. de Chestre
26	C. at West.	Robert de Twyford, —— ——
27	Westmin.	Robert Franceys, —— ——
28	Westmin.	H. de Braylesford, Robert Franceys
29	Westmin.	Thomas Adam, John Beck
31	Westmin.	Robert Fraunces, Thomas Adam
31	Westmin.	W. de Wakeburgg, Mi. de Breideston
31	Westmin.	Robert Fraunces, Thomas Adam
32	Westmin.	Will. de Wakeburgg, Roger Michel
34	Westmin.	Robert Fraunceys, John Foucher
34	Westmin.	Hen. de Braillesford, John Cockayn
35	Westmin.	Hen. de Braillesford, John Cockayn
36	Westmin.	John Cockayn, Robert Fraunceys
37	Westmin.	Edmund de Apelby, —— ——
38	Westmin.	Godf. Foljambe, Hen. de Braillesford
39	Westmin.	Rob. de Twyford, Ralph de Stathom
42	Westmin.	Robert de Twyford, John Foucher
43	Westmin.	Godfrey Foljambe, Rob. de Twyford
45	Westmin.	Godfrey Foljambe, John Foucher
45	C. Winch.	Godfrey Foljambe, John Foucher
46	Westmin.	Alured de Sulney, John Franceys
47	Westmin.	William Bokepuys, Ralph de Stathom
50	Westmin.	Edm. de Appleby, Ralph de Stathom
51	Westmin.	J. de la Pole de Hertingdon, E. Foucher

		RICHARD II.
1	Westmin.	Alured Sulwy, Robert de Twyford
2	Gloucest.	Oliver de Bartoun, Ralf de Stathom
2	Westmin.	Alured de Sulny, J. Curson de Ketilston
3	Westmin.	T. de Marchynton, R. de Braillesford
4	Northam.	Oliver de Barton, Will. de Sallowe

* Prynn's Brev. Parl. vol. 4. p. 663.

Parl.
5 Westmin. T. de Twyford, T. de Marchyngton
5 Westmin. T. de Marchyngton, Phil. de Okire
6 Westmin. Tho. de Wernesley, John Curson
6 Westmin. T. de Marchyngton, R. de Brailesford
7 Westmin. John Curson, Ralph de Braillesford
7 N. Sarum, Robert Fraunceys, Will. de Adderly
8 Westmin. Tho. de Wenesly, Will. de Detheckes
9 Westmin. Robert Fraunceyes, Will. de Adderly
12 Cambrid. Nic. de Montgomery, Rob. Fraunceys
13 Westmin. Thomas Wendesly, Nic. Montgomery
14 Westmin. William Adderly, Thomas Folgeam
15 Westmin. Philip de Okoure, Thomas Foljambe
16 Winches. John Dabridgecourt, Nic. Gousill, jun.
17 Westmin. Tho. de Wendesly, John de la Pole
18 Westmin. John Cokayne, Peter de Melbourn
20 Westmin. Will. Dethek, Roger de Bradeburn
21 Westmin. John Dabriggecourt, Will. Meynill

HENRY IV.

1 Westmin. Walter Blount, John Curson
2 Westmin. Thomas de Greseley, Peter del Pole
4 Westmin. John Cokayne, Roger Leche
5 Westmin. Nic. de Longford, John Curson
6 Coventry, John Cokayn, Roger Bradburn
8 Westmin. Roger Leche, Roger Bradshaw
9 Gloucest. Robert de Strelley, Thomas Okere
12 Westmin. Nic. Mountgomery, Rob. Fraunceys

HENRY V.

1 Westmin. Roger Leche, Thomas Chaworth
1 Leicester, Philip Leche, Nic. Mountgomery
2 Westmin. Roger Leche, Thomas Gresley
3 Westmin. Nic. Mountgomery, John de la Pole
5 Westmin. Thomas de Gresley, John de Pole
8 Westmin. Thomas Blount, Henry Booth
8 Westmin. John de Strelley, Thomas de Okere
9 Westmin. Nic. Gosyll, Thomas Okeover

HENRY VI.

1 Westmin. Richard Vernon, John Cockeyn
2 Westmin. Henry Booth, John Curson
3 Westmin. Henry Boothe, Thomas Makeworth
4 Leicester, Richard Vernon, John de la Pole
6 Westmin. John Cockayn, Henry del Both
8 Westmin. John Curson, Gerard Meynell
9 Westmin. John Cokayne, Thomas Makworth
13 Westmin. John Cursun, Gerard Meynell
15 Cambrid. Fulk Vernon, Robert Franceys
20 Westmin. John Curson, William Vernon
25 Cambrid. Walter Blount, Nic. Fitz Herbert
27 Westmin. John Sacheverel, Walter Blount, esq.
28 Westmin. William Vernon, John Sacheverel
29 Westmin. Will. Vernon, esq. Wal. Blount, esq.
31 Reading, Wal. Blount, esq. Nic. Fitz Herbert
33 Westmin. Walter Blount, esq. Rob. Baily, esq.
39 Westmin. John Greisley, knt. Wal. Blount, esq.

EDWARD IV.

7 Westmin. William Blount, William Vernon
12 Westmin. Nic. Longford, James Blount
17 Westmin. John Gresley, Henry Vernon.

The Writs, Returns, and Indentures, from the 17th of Edward IV. to the 33rd of Henry VIII. are all lost.

HENRY VIII.

33 Westmin. ——— ———, knight, George Vernon, esq.

EDWARD VI.

1 Westmin. ——— ———, ——— ———
6 Westmin. Tho. Cockyn, knt. H. Bradburn, knt.

MARY.

1 Westmin. John Port, knt. Rich. Blackwall, esq.
1 Oxford, Francis Curson, Thomas Powtrell.
1 & 2 Westm. ——— ———, ——— ———
2 & 3 Westm. H. Bradborn, knight ——— Vincent, esq.
4 & 5 Westm. John Zouch, Godfrey Foljambe, esq.

ELIZABETH.

1 Westmin. ——— ———, ——— ———
5 Westmin. W. St. Lowe, knt. R. Wennesley, esq.
13 Westmin. Fran. Curson, esq. R. Wennesley, esq.
14 Westmin. Gil. Talbot, esq. Henry Cavendish, esq.
27 Westmin. Hen. Talbot, esq. H. Cavendish, esq.
Parl.
28 Westmin. Hen. Talbot, esq. H. Cavendish, esq.
31 Westmin. John Zouch, esq. H. Cavendish, esq.
35 Westmin. G. Manners, esq. H. Cavendish, esq.
39 Westmin. ——— ———, ——— ———
43 Westmin. Fra. Leake, esq. P. Frecheville, esq.

JAMES I.

1 Westmin. John Harper, knight, W. Knyfton, esq.
12 Westmin. ——— ———, ——— ———
18 Westmin. William Lord Cavendish, John Stanhope, knight
21 Westmin. Will. Lord Cavendish, Peter Frecheville, knight

CHARLES I.

1 Westmin. Will. Lord Cavendish, John Stanhope, esq.
1 Westmin. William Lord Cavendish, John Manners, esq.
3 Westmin. E. Leeche, esq. John Fretchvile, esq.
15 Westmin. John Manners, esq. John Curson, bart.
16 Westmin. John Curson, bart. John Cook, knight

CHARLES II.

12 Westmin. Henry Cavendish, Viscount Mansfield, John Ferrers, esq.
13 Westmin. Will. Lord Cavendish, John Fretchvile, esq.
The latter dying, William Sacheverell, esq. was chosen in his place
31 Westmin. William Lord Cavendish, William Sacheverell, esq.
31 Westmin. William Lord Cavendish, William Sacheverell, esq.
32 Oxford, William Lord Cavendish, William Sacheverell, esq.

JAMES II.

1 Westmin. Robert Coke, bt. Gilbert Clerke, knt.

WILLIAM AND MARY.

1 Westmin. Gilbert Clerke, knt. John Gell, bart.
Sir John Gell dying, Sir Philip Gell, bart. was chosen
2 Westmin. Gilb. Clerke, knt. Henry Gilbert, esq.

WILLIAM III.

7 Westmin. Hon. William Marquis of Hartington, Gilbert Clerke, knight.
10 Westmin. Hon. William Marquis of Hartington, Thomas Coke, esq.
12 Westmin. Rt. hon. Will. Marquis of Hartington, Rt. hon. John Lord Roos.
13 Westmin. John Curson, esq. Tho. Coke, esq.

ANNE.

1 Westmin. John Curson, esq. Tho. Coke, esq.
4 Westmin. John Curson, esq. Tho. Coke, esq.
7 Westmin. Rt. hon. Thomas Coke, esq. Vice Chamberlain, John Curson, esq.
9 Westmin. John Curzon, esq. Godf. Clark, esq.
12 Westmin. John Curzon, esq. Godf. Clark, esq.

GEORGE I.

Year.
1714 Sir John Curzon, baronet, Godfrey Clarke
Act for Septennial Parliaments passed, in 1716
22 Sir John Curzon, baronet, Godfrey Clarke

GEORGE II.

27 Sir Nathaniel Curzon, baronet, Godfrey Clarke
34 Lord Ch. Cavendish, Sir Nath. Curzon, baronet
41 Marquis of Hartington, Sir Nath. Curzon, bart.
47 Marquis of Hartington, Sir Nath. Curzon, bart.
The former being called up by writ to the House of Peers, Lord Frederick Cavendish was chosen in June, 1751
54 Lord George Cavendish, Sir Nath. Curzon, bart.

GEORGE III.

61 Lord G. Cavendish, Sir H. Harpur, bart.
68 Lord Geo. Cavendish, Godf. B. Clarke, esq.
74 Lord Geo. Cavendish, Godf. B. Clarke, esq.
The latter dying, the Hon. Nathaniel Curzon was elected in his place

Parl.
1780 Lord Rich. Cavendish, Hon. Nath. Curzon
On Lord Richard's decease, Lord George Cavendish was elected in his place
84 Lord Geo. Cavendish, Ed. M. Mundy, esq.
90 Lord Geo. Cavendish, Ed. M. Mundy, esq.
96 Lord John Cavendish, Ed. M. Mundy, esq.
97 Lord G. H. A. Cavendish, (vice Lord John Cavendish deceased,) E. M. Mundy, esq.

Parl.
Who in every successive Parliament have represented the county till the death of E. M. Mundy, esq.

GEORGE IV.

1823 Francis Mundy, of Markeaton, esq. who succeeded E. M. Mundy, esq.

(No. 5.)

Abstract of Queen Mary's Grants to the Bailiffs and Burgesses in 1555.

MARY, by the Grace of God, of England, France and Ireland, Queen, to whom these shall come greeting.

Know ye; that as well in consideration that the bailiffs and burgesses of our town of Derby, in our county of Derby, may be better able to support and sustain the burdens of the same, as for the sum of £266. 13*s.* 4*d.* in hand paid to our beloved chancellor, Edward Peckhorn, and for several other causes and considerations, Us to these presents specially moving, of our special grace and mere motion have given and granted, and by these presents do give and grant to the said bailiffs and burgesses:

1st. Our one messuage and tenement, and all lands, meadows, feedings, pastures, and all other hereditaments whatsoever, now or late in the tenure of Thomas Lyster, in the parish of St. Alkmund, in Derby, and lately belonging to the abbot of Darley, and part and parcel thereof.

2nd. One barn in the possession of Nicholas Fallows, in Alvaston, in the parish of St. Michael, in Derby.

3rd. All those annual rents and services from lands and tenements, in Alvaston aforesaid.

4th. All those our lands, messuages and tenements, and all lands, meadows, feedings, pastures, commons and hereditaments whatsoever, with their appurtenances in Alvaston aforesaid, in the several tenures of Roger Ward, Robert Wright and Nicholas Fallows.

5th. All tithes and hay arising of and from the meadows, lands, feedings and pastures in Alvaston, in the possession of the said Roger Ward.

6th. One messuage and tenement, and all lands, meadows, feedings, pastures, commons and hereditaments whatsoever, with their appurtenances, in the tenure of John Thacker, lying in Osmaston, in the parish of St. Peter, in Derby.

7th. All the tithes of hay arising from the lands and meadows in the parish of St. Peter, in the tenure of William Leper, and parcel of the possessions of the abbey aforesaid.

8th. All mortuaries, profits and reversions from the Easter rolls and oblations in Derby, in the possession of Hugh Lyon, belonging to the College or Free Chapel of All Saints.

9th. Two acres and a half of land in Bridgcroft, alias Bitchcroft, in Derby, in the tenure of Richard Doughty.

10th. All tithes of corn, hay, wool and lambs, and all other tithes whatsoever in Quarndon, in the tenure of Richard Cotton, esq.

11th. All tithes of corn, hay, lambs, and all other tithes whatsoever in Little Eaton, in the parish of St. Alkmund, in the possession of William Allestree and John Cockeram.

12th. One messuage and tenement called the Stone House Prebend. And,

13th. All lands, meadows, feedings and hereditaments whatsoever, in the tenure of Oliver Thacker, lying and being in Little Chester.

14th. One barn and all lands, meadows, pastures, &c. in the tenure of Henry Cockayne, lying and being in Little Chester aforesaid.

15th. All those lands and hereditaments called the two small prebends in Little Chester, then in the possession of Anthony Lister.

16th. One messuage and tenement, and one close in Little Chester, then in the possession of William Scattergood.

17th. All manner of tithes of corn, grain and hay, and other tithes whatsoever in Little Chester, late in the tenure of Oliver Thacker.

18th. All those messuages, lands, tenements, meadows, feedings, pastures, &c. lately in the several tenures of Agnes Stafford, Henry Barrow, Isabel Heath, John Johnson and John Brown, lying in Derby, and to the guild of the Holy Trinity, in All Saints' church belonging.

19th. All those messuages, lands, tenements, meadows, feedings, pastures, rents, reversions, services and hereditaments whatsoever in Derby, belonging to the guild aforesaid.

20th. All those messuages, cottages, gardens, lands, tenements, meadows, feedings, pastures, commons and hereditaments whatsoever with the appurtenances, then in the tenure of Thomas Woodcock, Margaret Pycock, Edward Smedley, Alice Rothwell, Lawrence Spooner, Alice Allen, widow, Margaret Dorbudie, John Chapman, Nicholas Masters, Agnes Myles, widow, and Elizabeth Chackburne, lying in Derby, and belonging to the chantry of St. Mary, in the church of All Saints, and all those messuages, cottages, gardens, lands, tenements, meadows, feedings, pastures, rents, reversions, services and hereditaments whatsoever in Derby, belonging to the chantry aforesaid.

21st. And all those messuages, cottages, gardens, lands, tenements, meadows, feedings, pastures, commons, rents, reversions, services and hereditaments whatsoever, with the appurtenances, late in the tenure of Thomas Lowe, John Kingford, Thomas Mansfield, Margaret Middlemore, Robert Spencer, Henry Smith, Richard Cundy, Richard Kirk, "alias Oliver," George Carter, Edward Lowe, Thomas Ashbury and Richard Ward, lying in Derby, and to the chantry of St. Mary's, in the parish of St. Peter belonging.

22nd. And also all those messuages, cottages, gardens, lands, tenements, meadows, feedings, pastures, commons, rents, reversions, services and hereditaments whatsoever, &c. in the tenure of George Blake, Thomas Hodgkinson, John Hodgkinson, Richard Butler, Thomas Lenton, John Adlington, William Swinson, Richard Smith, Thomas Ward and Christopher Smith, lying in Derby, and to the chantry of St. Mary, in the parish of St. Werburgh lately belonging.

23rd. One messuage and tenement, and sixteen acres and a half of arable land, &c. in Derby, then in the tenure of Robert Smith.

24th. One garden, &c. in Derby, then in the tenure of Thomas Blackshaw.

25th. Seven acres and a half of arable land, in Derby, then in the tenure of Henry Ellis.

26th. One croft in Derby, then in the tenure of Christopher Fisher.

27th. One messuage, tenement and garden, in the Bridge-gate, in Derby, then in the tenure of Richard Bartholomew.

28th. One cottage and three acres and a half of arable land, in Derby, late in the possession of Robert Bourn.

29th. One messuage, and all lands, meadows, pastures, &c. in Derby, and the fields of Derby, two gardens in Derby, late in the tenure of Agnes Yardley, and all meadows, pastures and hereditaments in Derby, and the hereditaments thereof.

30th. One tenement, lands, &c. then in the tenure of Christopher Thacker.

31st. One tenement, &c. in Derby, late in the tenure of Cecily Smalley.

32nd. Two gardens in Derby, late in the possession of Thomas Harewood.

33rd. The advowson, donation, &c. of the vicarage of the church of St. Peter, in Derby.

34th. One messuage or tenement in Normanton, near Derby, then in the possession of William Tabberer.

35th. One other messuage in Normanton aforesaid, then in the possession of William Duffield.

36th. One other tenement in Normanton, then in the possession of Thomas Portington.

37th. One other tenement in Derby, in the tenure of Richard Stringer.

38th. All messuages, lands, tenements, meadows, pastures, &c. in the several tenures of several persons, and demised to Oliver Thacker in Derby.

39th. One garden in Derby, in the tenure of Godfrey Fletcher.

40th. One messuage or tenement in Derby, in the tenure of Roger Moore.

41st. One cottage near St. Helen's, in Derby, and one other cottage near the church of St. Werburgh, and four tofts of land, in Newland, in the parish of St. Werburgh, in Derby, late in the tenure of Elizabeth Cooper.

42nd. One tenement in Derby, then in the tenure of John Horsby.

43rd. One messuage or tenement, and ten acres of arable land in the parish of St. Peter, in Derby, then in the tenure of Robert Chatterton.

44th. Two tenements, and six acres and a half of arable land in Derby and fields thereof, in the tenure of Henry Halbourne.

45th. Nine acres of meadow land in the fields of Derby, late in the tenure of Richard Heye.

46th. Three acres of land, meadow and pasture, in the town and fields of Derby, late in the tenure of Roger Moore.

47th. One mill, called St. Mary's mill, in Derby, late in the tenure of Robert Bainbridge.

48th. Three fulling mills and one water mill, called Derwent mills, and two pieces of land, called the By-flat, on the east part of the river Derwent.

49th. One piece of land, called the Water Wash, also the Ollers, being between the Fleam and the said water of Derwent, late in the tenure of Robert Sacheverell, in the parish of St. Alkmund in Derby.

50th. One tithe barn, and tithe of corn, grain and hay, in Alvaston and Bowton, in the parish of St. Peter and St. Michael in Derby, late in the possession (or tenure) of Christopher Gyers and William Allestry.

51st. One messuage and tenement, lands, meadows, feedings, pastures, &c. in Alvaston, aforesaid, late in the tenure of Thomas Foster.

52nd. All tithes of hay in Lychurch, in the parish of St. Peter, late in the tenure of William Collyer.

53rd. The free chapel, with all its appurtenances, called St. James's chapel, in Derby, &c. and all messuages, cottages, lands, tenements, meadows, feedings, commons, pastures, services and hereditaments whatsoever in Derby, or elsewhere in the said county of Derby, to the said late free chapel belonging.

54th. The church of St. Michael, in Derby, &c.

55th. The advowson, donation and right of patronage of the vicarage of Horne (alias) Heath, in the county of Derby, and also all manner of woods, underwoods and trees whatsoever growing upon the premises. And also all rents and profits whatsoever reserved from the premises, in as ample form and manner as they were heretofore enjoyed by the abbot of Darley, or Sir Thomas Smith, or any other master of the college, or free chapel of All Saints, &c. or by the crown. All which messuages, lands, tenements, tithes, &c. amounted to the clear yearly value of £77. 2*s.* 7*d.* to hold all the premises unto the said bailiffs and burgesses and their successors for ever, to the use and behoof of the said bailiffs and burgesses under the yearly rent of £41. 14*s.* 11*d.* at Michaelmas every year.

56th. And further of our great favour we give unto the said bailiffs and burgesses all the issues, rents, &c. of the premises to have to the said bailiffs and burgesses as our free gift, hereby exonerating, acquitting and preserving as well the bailiffs and burgesses and their successors as the aforesaid messuages, lands, &c. against us, our heirs and successors, saving and excepting the reservations before, and hereinafter mentioned, viz. £41. 14*s.* 11*d.* reserved rent, saving and excepting the services before reserved and saving and excepting one shilling paid from the guild to Thomas Ward and his heirs, and saving and excepting ten pence to be paid yearly to the chamberlains and twelve pence to be paid to the churchwardens of All Saints' parish, and also

saving and excepting £13. 6*s*. 8*d*. part of the issues out of the premises, and yearly to be paid to two priests and ministers performing divine service and taking care of souls in the parish of All Saints', and saving and excepting £6. 13*s*. 4*d*. part of the premises and as the salary and stipend of a priest or minister yearly, performing divine service in the church of St. Alkmund in the said town of Derby yearly to be paid, and saving and excepting £1. 13*s*. 4*d*. yearly to be paid to the bailiffs, and the collectors of the rents of all and singular the messuages to the college and chantry belonging.

57th. And we further will, ordain and grant that there shall be one free school for ever to be maintained by the said bailiffs and burgesses and their successors, to the master and usher £13. 16*s*. 8*d*. to be paid quarterly by equal portions every year.

58th. And further we will for ourselves and our heirs and successors ordain and grant that in the church of All Saints there shall be two perpetual vicars, to be instituted and endowed, who shall have perpetual succession, and be instead of rectors there, and shall keep residence there, and maintain hospitality there, and have cure of souls of the parishioners there, and do and execute all other things which are known to belong to the office of a rector or vicar.

59th. And that in the church of St. Alkmund there shall be one perpetual vicarage, and one perpetual vicar, who shall be instituted and endowed, shall have perpetual succession, and be instead of rector there, and keep residence there, and maintain hospitality there, shall have cure of souls of the parishioners there, and do and execute all other things which are known to belong to the office of a rector or vicar.

60th. And we have granted to the bailiffs and their successors full authority, power and licence to erect, make and establish two perpetual vicars, and two perpetual vicarages in the parish church of All Saints, and one perpetual vicar, and one perpetual vicarage in the parish church of St. Alkmund.

61st. And to endow the vicars so erected, made and established, and each of them and their successors with mansion houses, to wit, to each of them one, and with the annual rents or pensions of seven pounds six shillings and eight pence to each of them, or in tithes, &c. to that value.

62nd. And we ordain that the vicars so to be erected and established and their successors, vicars of All Saints and St. Alkmund, shall have perpetual succession, and be in the place of rectors in those churches, and shall keep residence there, and maintain hospitality there, and have cure of souls there, and perform and execute all other things which are known to belong to the office of rector or vicar.

63rd. The vicars of the church of All Saints, known by the name of perpetual vicars, shall be henceforth fit, qualified and capable in law to have, demand and receive for themselves and their successors, perpetual vicars of All Saints, from the said bailiffs, &c. a mansion house, or mansion houses, and the several annual pensions of seven pounds six shillings and eight pence, &c.

64th. And the vicar of St. Alkmund's shall be fit, qualified and capable in law to have, demand and receive a mansion house and annuity of seven pounds six shillings and eight pence, or tithes, &c. to that value.

65th. And we give and grant special licence to the vicars of All Saints' and St. Alkmund's, so to be made and established that they and every of them may have and receive the mansion houses and annual pensions, &c. from the bailiffs and their successors, the statute of Mortmain, or any other statute, order or provision made heretofore, or any other cause or matter whatsoever to the contrary in anywise notwithstanding.

66th. And we will, and by these presents ordain and grant that the advowsons, presentations, nominations, donations and right of patronage of the vicarages of the churches of All Saints' and St. Alkmund's so to be erected, &c. shall belong to the bailiffs and their successors only for ever.

67th. We will, and by these presents grant that the bailiffs, &c. shall have these our letters patent under our great seal without fine or fee, in the hanaper office, &c. In testimony whereof we have caused these our letters to become patents. Witness

ourself at Westminster the 21st day of May in the first year of our reign (James the First) 1603.

By writ of Privy Seal, &c.

COTTON.

Inrolled before Francis Neale, auditor of the counties of Nottingham and Derby, in Michaelmas Term, in the year 44 and 45 of Elizabeth, now queen—1602.

Rev. Robert Simpson's Hist. of Derby.

(No. 6.)

A List of the Bailiffs of Derby.

"DERBY must have been governed by a bailiff in very early ages; but the time cannot be ascertained. The corporation being unable to prove their right to a bailiff, when sued in the king's courts, four hundred and sixty years ago, proves the great antiquity of this officer. It was even then held by prescription."*

King Richard the IIIrd. appears first to have granted to the burgesses of Derby the privilege of choosing a bailiff. There is, however, no list of them to be found prior to the reign of Henry VIII. Here we find the ancestors of many families still resident.

A true Catalogue of the bailiffs of the borough of Derby, from the fifth year of the reign of king Henry the VIIIth, to the thirteenth of king Charles the Ist, when the charter was renewed and the borough had a mayor instead of the two bailiffs.

1513 John Brownhill, Thomas Bartholomew
14 John Stringer, Christopher Thacker
15 Robert Liversage, William Farrington
16 Edward Walker, John Jepson
17 James Oxeley, Roger Haye
18 William Woodhouse, John Johnson
19 Nicholas Orchard, Thomas Parr
20 Roger Moore, Thomas Walker
21 Thomas Bartholomew, John Storrer
22 Thomas Harnold, Thomas Parker
23 Roger Smith, Hugh Walker
24 Robert Liversage, John Brookhouse
25 Robert Jepson, Oliver Thacker
26 Robert York, Elias Cooper
27 Nicholas Orchard, Roger Haye
28 Roger Moore, Thomas Ward
29 Richard Ilsley, Thomas Blockshaw
30 Thomas Bartholomew, John Storrer
31 Thomas Walker, Thomas Parker
32 Roger Smith, John Brookhouse
33 Robert Jepson, John Johnson
34 Christopher Thacker, Robert York
35 Roger Haye, Elias Cooper
36 Thomas Parr, Thomas Ward
37 Thomas Ilsley, Thomas Blackshaw
38 Oliver Thacker, Robert Ragge
39 Thomas Parker, Richard Stringer
40 William Bradshaw, Edward Turner
41 William Allestry, William Hodgkinson
42 Robert Brookhouse, William Smith
43 Humphry Sutton, Edward Lenton
44 Thomas Ward, William Buckley
45 John Botham, John Alsop
46 Robert Ragg, Thomas Storer
47 Richard Ward, Robert Smith
48 Richard Stringer, William Bradshaw
49 William Allestry, Richard Parkinson
50 John Wilson, William Fletcher
51 Richard Haye, Anthony Bate
52 Thomas Ward, Edward Garton
53 Oliver Thacker, Humphry Lutton
54 William Moore, Thomas Walker
55 Richard Ward, William Bembrigge

1556 William Bradshaw, John Botham
57 James Thacker, Thomas Alsop
58 William Allestry, Richard Doughtye
59 Richard Parkinson, Ralph Bentley
60 Thomas Brookhouse, Robert Stringer
61 Henry York, Robert Turner
62 William Moore, Robert Watson
63 Richard Ward, William Bembrigge
64 William Aspinhall, Thomas Bate
65 Thomas Golder, William Bradshaw
66 William Allestry, Anthony Bate
67 John Botham, Richard Doughty
68 Thomas Alsop, Richard Collier
69 Ralph Bentley, William Wandall
70 Thomas Brookhouse, Richard Harrison
71 Robert Stringer, Ralph Houghton
72 Henry York, Edward Bonsall
73 Robert Turner, Robert Greves
74 Robert Watson, Ralph Ballydon
75 William Bembrigge, Edward Turner
76 Thomas Bate, Thomas Walker
77 Thomas Goulder, Thomas Ilsley
78 William Allestry, Edward Fletcher
79 Richard Doughty, Thomas Campion
80 Ralph Bentley, Robert Wilmot
81 William Wandall, William Bolton
82 Robert Stringer, Henry Woxden
83 Ralph Houghton, Edmund Smith
84 Thomas York, Robert Wood
85 Edward Turner, Richard Fletcher, butcher
86 Thomas Bate, William Bentley
87 Thomas Walker, Thomas Ilsley
88 Richard Doughty, Richard Fletcher, mercer
89 Ralph Bentley, Thomas Campion
90 Robert Wilmot, William Botham
91 Robert Stringer, Thomas Fritch
92 Robert Wood, Robert Brookhouse
93 Edmund Turner, Edmund Smith
94 William Bentley, Edmund Sleigh
95 Thomas Walker, Elias Hawkes
96 Thomas Ilsley, John Parker
97 Robert Fletcher, Robert Brownell
98 William Botham, Nicholas Sleigh

* Hutton, page 96.

1599 Robert Stringer, James Osborn
1600 Robert Wood, Richard Haughton
1 Robert Smith, Robert Bate
2 William Bentley, Richard Porter
3 Thomas Walker, Thomas Beck
4 Edward Sleigh, William Patter
5 John Parker, Peter Gery
6 Robert Brouuell, William Wandall
7 Robert Wood, William Turner
8 Richard Haughton, Gervese Sleigh
9 Edmund Smith, Matthew Bate
10 William Bentley, Oliver Potter
11 Richard Porter, Thomas Fisher
12 Thomas Beck, William Walker
13 Peter Gery, Robert Patter
14 Richard Wandall, William Ward
15 William Turner, Thomas Smith
16 Matthew Bate, Francis Goodwynne
17 Thomas Fletcher, Thomas Stringer
18 Oliver Potter, Henry Fisher
1619 Peter Geary, Edward Walker
20 Robert Patter, Samuel Parker
21 William Turner, William Patter
22 Thomas Smith, Nathaniel Halloms
23 Francis Goodwynne, William Bradshaw
24 Thomas Fisher, William Francis
25 Henry Wandall, Stephen Sleigh
26 Henry Fisher, Thomas Walker
27 Henry Mellor, Edward Walker
28 William Potter, Edward Large
29 Thomas Smith, John Hope
30 Nathaniel Hallows, Luke Whillington
31 William Bradshaw, Thomas Haughton
32 William Francis, Samuel Doughty
33 Thomas Fisher, Francis Goodwynne
34 Henry Wandall, Joseph Parker
35 Stephen Sleigh, Robert Brookhouse
36 Henry Fisher, Thomas Parker
37 Henry Mellor, John Hope.*

(No. 7.)

Names of the Mayors for the Borough of Derby, from the first that was chosen.

On the 3rd of July, 1638, by the king's charter, then granted to the town, the two last bailiffs were the two first mayors, Mr. Mellor being proclaimed the 3rd day of July, to be the mayor until Michaelmas, and twelve months after; but he died on the 5th of February following, and Mr. Hope served the year out.

"To Mr. Henry Mellor, the first Mayor of Derby:

You seeme the prime bough of an ample tree,
Whereon if fair expected fruits we see.
Whilest others' fames with ranke reproaches meete,
As mel or manna shall your name be sweete."

1638 HENRY MELLOR
Died Feb. the 5th, Mr. Hope succeeded him, and served the year out
39 John Hope
40 Edward Large
41 Luke Whittington
42 Henry Wandell
43 Luke Whittington
44 Luke Whittington
45 Gervase Bennet
Plague in Derby
46 John Dalton
47 Robert Mellor
48 Thomas Sleigh
King Charles I. beheaded, Jan. 30
49 Edward Large
50 John Parker
51 William Willot
52 John Dalton
53 Thomas Youle
54 Humphry Yates
55 Thomas Sleigh
56 Gilbert Ward
57 Nathaniel Hallowes
58 Edward Large
He died, and John Parker served the year out
59 John Gisborne
60 John Dunnidge
61 Thomas Potter
62 John Brookhouse
63 Edward Walker
64 Robert Wandel
1665 John Harryman
66 Hugh Newton
Sept. 2nd, a great fire in London, which burned down 113,000 houses, the city gates, guildhall, and 86 churches, among which was St. Paul's cathedral
67 Samuel Spateman
68 John Dalton
69 Humphrey Yates
70 James Ward
71 John Spateman
He died in the year, and Roger Newton served it out
72 Roger Newton
73 Thomas Goodwin
74 George Blackwell
75 Edward Walker
76 Samuel Spateman
77 John Brookhouse
78 Robert Wandel
Popish plot discovered
79 Roger Newton
80 John Lord
81 Edward Walker
The association burnt, and the town charter surrendered up
82 Roger Newton
83 Thomas Goodwin
The great frost
84 John Dunnidge
King Charles II. died
85 Joseph Worden

* Hutton, p. 96—101.

1686 Solomon Roberts
87 Leonard Sad, displaced Jan. 11, by King James II. and Ralph Brough appointed
88 John Cheshire
King James II. abdicated the crown
89 Samuel Spateman
90 Samuel Cheshire
91 Samuel Fletcher
92 John Lord
93 Thomas Goodwin
94 Henry Holmes
95 Henry Noton
96 Solomon Roberts
97 William Franceys
Mr. Bagnold, town clerk, died, and Mr. Heathcote chosen
98 Thomas Goodwin
He died Aug. 26, and Thomas Carter served the year out
99 William Franceys
1700 William Franceys
1 Thomas Carter
King William died, March 8
2 Joseph Bloodworth
3 Francis Cockayne
4 William Turner
5 Thomas Bott
The hall regulated; members turned out, and others put in
6 Joseph Broughton
7 Thomas Byram
8 John Holmes
9 Thomas Fisher
10 Richard Ward
11 Francis Cockayne
12 Thomas Gisborne
13 Joseph Broughton
Queen Anne died, August 1st
14 Thomas Fisher
15 Thomas Rivett
16 John Bagnold
17 Thomas Gery
18 John Holmes
19 Richard Ward
The river Derwent made navigable
20 Hugh Bateman
21 Francis Cockayne
22 William Woolley
The church of All Saints taken down to be re-built
23 Philip Parr
Mr. Heathcote, town clerk, died, and Mr. Hugh Bateman, jun. chosen January 16th
24 Thomas Gisborne
25 Samuel Cooper
All Saints church opened, November 21st
26 John Bagnold
King George I. died the 11th of June
27 Thomas Houghton
28 Robert Wagstaffe
29 John Gisborne
30 Isaac Borrow
The old town hall taken down
31 Nathaniel Edwards
32 John Holmes
33 Francis Cockayne
34 Thomas Gisborne
35 Samuel Cooper
36 John Bagnold
37 John Gisborne
Queen Caroline died November 20th
38 Robert Wagstaffe
39 Robert Bakewell
Nine weeks' frost
40 Joshua Smith
A great flood in Derby.—Mr. Hugh Bateman, town-clerk, resigned July 25th, and Mr. William Bateman was chosen
41 Samuel Fox
42 Isaac Borrow
43 Thomas Gisborne
44 Samuel Cooper
45 Robert Hague
Rebel army entered Derby with the Pretender's son at their head, December 4th, and after committing various depredations, left it with great precipitation Friday, December 6th
1746 Humphrey Booth
47 Henry Franceys
He died Jan. 1st, and Humphrey Booth served the year out
48 Matthew Howe
49 Thomas Gisborne
50 Joseph Bingham
51 Robert Bakewell
52 Humphrey Booth
53 Matthew Howe
54 Robert Bakewell
55 William Evans
56 Robert Bakewell
Mr. Bateman, town-clerk, died, and Mr. Blyth chosen, August 14th
57 John Bingham
58 Samuel Crompton
Mr. Blyth, town-clerk, died, and Mr. J. Wright chosen
59 Robert Bakewell
60 Joseph Bingham
King George II. died October 25th, and King George III. proclaimed the next day
61 Thomas Rivett
62 Thomas Milnes
He died on the 19th of Oct. and Joshua Smith served the year out.—War with Spain
63 John Heath
Peace with France and Spain, Jan. 10
64 Samuel Wilde
65 William Evans
Mr. Wright, town-clerk, resigned, and Mr. Wm. Merrill Lockett chosen in his room
66 Samuel Wilde
67 Samuel Crompton
68 William Evans
69 Thomas Stamford
70 Henry Flint
71 Thomas Eaton
72 John Heath
73 William Edwards
Great flood, January 17, the water reached the lower end of Rotten-Row
74 Christopher Heath
75 Robert Hope
76 William Leaper
77 Robert Hope
He died and Samuel Crompton served the year out
78 Francis Ashby
79 Matthew Howe
80 William Edwards
81 John Hope
82 Samuel Crompton
83 Thomas Mather
84 Francis Ashby
85 William Edwards
86 Henry Flint
Sadler-gate bridge re-built
87 John Hope
St. Peter's bridge re-built.
88 Samuel Crompton
John Whitehurst, author of the Theory of the Earth died 18th February
89 Thomas Mather
St. Mary's bridge began to be re-built
90 Francis Ashby
91 Thomas Lowe
Willersley castle burned, 8th August
92 John Crompton
93 William Snowden
Severe frost
94 Richard Leaper
95 John Hope
96 John Leaper Newton
97 Rev. Charles Stead Hope
Jedediah Strutt, esq. died
98 William Edwards
99 Henry Browne
1800 John Crompton
1 Samuel Rowland
2 Thomas Lowe

Dr. Darwin died, 17th April, aged 70
1803 William Snowden
4 John Hope
5 Rev. Charles Stead Hope
Armory erected
6 John Drewry
7 Richard Leaper
8 Henry Brown
9 Samuel Rowland
10 John Crompton
Derbyshire general infirmary opened, 4th June
11 Thomas Haden
12 Henry Lowe
13 Thomas Lowe
14 John Drewry
Intense frost; the Thames frozen
15 Richard Leaper
1816 Rev. Charles Stead Hope
17 John Crompton
18 Samuel Rowland
Bryan Thomas Balguy, esq. appointed town clerk, Aug. 8, on the resignation of Edward Ward, esq.
19 Thomas Haden
20 James Oakes
21 Henry Lowe
22 Thomas Lowe
23 John Drewry
24 Richard Leaper
25 Rev. Charles Stead Hope
26 John Crompton
27 Samuel Rowland
28 John Bell Crompton

(No. 8.)

Members of Parliament for the Borough of Derby, from the twenty-third parliament of Edward the First to the present time.

EDWARD I.

Parl.
23 John de la Corniere, Ranulph de Makeneye
26 Will Broune de Derbe, Nic le Loriner
28 Nic de Loriner, Gervase de Derby
30 Gervase de Wilnye, Adam le Rede
33 John de la Corne, Rich Cardoyl
34 John de Chadesdon, Gervase de Wileyne
35 Hugh Alibon, Peter le Chapman

EDWARD II.

1 John Chaddesdon, Gervase de Wilney
4 Henry Alwaston, Thomas del Stade
5 Thomas del Sled, Henry Bindetton
6 Jeffry de Leycestre, Robert de Breydsale
7 John Fitz John, Henry Lomb
8 Adam le Rede, Will de Aleby
8 Will de Aleby, Adam le Rede
12 Simon de Chester, Richard Breddon
12 Alex de Holand, John de Weston
19 Henry le Carpenter, John Fitz Richard

EDWARD III.

1 John Fitz Gilbert, Ferhun Tutbury
2 Simon de Chester, John Collings
2 Thomas Tutaxbar, Geffry Snayth
2 Will Nottingham, John de Weston
4 Simon de Nottingham, John de Weston
4 Will Nottingham, Simon Chedel
7 Hugh Allibon, John Gibbonson
8 John Gibbenson —— ——
9 Nic Langford, John Fitz Thomas
9 Simon de Chester, John Gibbenson
10 John Fitz William, Thomas Tuttebury
11 William de Derby, John Hache, Robert Allibon
11 William de Derby, Robert de Weston
11 Simon de Chester, Robert Allibon
11 Henry del Howe, Robert Saundre
12 Alex Holland, John Weston
12 John Gibbonson, John Preston
12 Thomas Titbury, Thomas Thurmondsley
14 Thomas de Tutbury, Thomas Derby
14 Richard de Trowell, Peter de Querndon
15 Simon de Nottingham, Thomas de Derby
17 Will de Nottingham, Simon de Chester
21 Will de Chaddesden, Thomas de Tutbury
23 Will Gilbert, John de Chaddesden
24 Thomas Tutbury, William de Derby
27 William Chester, Richard Chelford
28 Thomas Tutbury, Henry Diddound
28 Edmund Toucher, John Beck
29 William Ennington, William Nayle
Parl.
31 William de Chester, William Nayle
34 Thomas Tutbury, John Gilbert
34 Peter Prentiz, William de Rossington
35 Peter Prentiz, William de Rossington
36 John Trowell, John Weeke
37 John Bradon, Robert Allibon
38 William Chester, John Gilbert
39 John Berd, William Sese
42 John de Brakkeley, William Glasyere
43 John Preest, John de Brakkeley
45 John Trowell, —— ——
46 William Chester, John Gilberd
47 William Pakeman, Roger Allibon
50 William Groos, John de Berdee

RICHARD II.

2 John de Heye, Richard de Trowell
2 Henry Flamstead, Roger Allibon
3 Richard Dell, Roger Ash
6 Thomas Toppeleyes, John Hay
7 William Pakeman, John Bowyer
7 Richard de Trowell, John Gibbon
8 Richard Sherman, John de Stockes
9 Richard Trowell, John Dell
10 John Stod, John Prentis
12 William Pakeman, Hugh Adam
13 John del Heye, John de Stokes
15 Richard Shereman, Thomas Docking
18 William Grosse, John de Stoke
20 William Grosse, Thomas Shore

HENRY IV.

1 John Stockes, Thomas Docking
4 Elias del Stok, Richard de Trowell
6 John del Stokes, John Prentiz
8 Thomas Goldsmith, John Fairclogh
12 John Brasier, Thomas Shore

HENRY V.

1 Elias del Stock, —— ——
2 Elias del Stock, Thomas Ridgway
3 Elias del Stock, Roger Walley
5 Robert Ireland, Thomas Steppingstone
7 Thomas Goldsmith, John Fairclogh
8 Robert Smith, Richard Browne
9 Ralph Shore, John Spicer

HENRY VI.

1 John Stokes, John Barkere
2 John de Both, Elias Dell

Parl.
3 John Stokes, Elias Dell
4 Roger Wolley, Henry Crabbe
6 Nic Meysham, John de Stockkys
8 John de Bathe, Elias Stokkys
9 Thomas Stokkes, Robert Smyth
11 John Booth, Robert Sutton
13 John Bothe, Thomas Stokeys
15 Thomas Stokks, Elias Tildesley
20 Thomas Stokkys, Henry Spicer
25 Thomas Chatley, Robert Mundy
27 Thomas Chatterley, John Spycer
28 Richard Chatteley, Thomas Chattely
28 Richard Chitterley, Thomas Chitterley
29 Thomas Acard, Thomas Bradshawe
31 —— ——, —— ——
33 John Bird, Edward Lovet
38 John Bird, William Hunter

EDWARD IV.

7 Thomas Bakynton, Thomas Allestre
12 John Newton, Roger Wilkinson
17 John Briddle, sen. John Newton

HENRY VIII.

33 Thomas Sutton, gent. William Allestre

EDWARD VI.

1 —— ——, —— ——
6 Robert Ragge, William Allestry

MARY.

1 Thomas Sutton, esq. George Charney, gent.
1 William Alestry, George Stringer

PHILIP AND MARY.

1 & 2 William Moor, Richard Beynbrygge
2 & 3 Richard Warde, William Alestry
4 & 5 James Thatcher, William Baynbrigge, gent.

ELIZABETH.

1 —— ——, —— ——
5 William Moor, gent. William Baynbrigge, gent.
13 Robert Stringer, Robert Baynbrigge
14 Robert Stringer, Tristram Tirwhite
Tristram Tirwhite was succeeded by Robert Baynbrigge
27 Henry Beaumont, esq. William Botham, esq.
28 William Botham, Robert Baynbrigge
31 William Botham, Richard Fletcher
35 William Botham, Robert Stringer
39 —— ——, —— ——
43 Peter Ewer, esq. John Baxter, esq.

JAMES I.

1 John Baxter, gent. Edmund Slighe, gent.
12 —— ——, —— ——
18 Timothy Leving, esq. Edward Leech, esq.
21 Edward Leech, knt. Timothy Leving, esq.

CHARLES I.

1 Edward Leech, knt. Timothy Leving, esq.
1 Henry Crofts, knt. John Thorogood, esq.
3 Peter Mainwaring, Timothy Leving, esq.
15 William Allestry, esq. Nathaniel Hallowes, ald.
16 William Allestry, esq. Nathaniel Hallowes, ald.

COMMONWEALTH.

Gervase Bennet, ald. John Dalton, gent.
The representatives in parliament for the county at this time were John Gell and Thomas Saunders esqrs. They were also chosen members of the parliament which was began Jan. 1658, and dissolved April 22, 1659

CHARLES II.

12 John Dalton, Roger Alestry, esq.
13 Roger Alestry, esq. John Dalton, esq.
The former was succeeded by Anchetil Gray, esq.
31 George Vernon, esq. Anchetil Gray, esq.
32 Anchetil Gray, esq. George Vernon, esq.

JAMES II.

Parl.
1 John Coke, esq. William Allestry, esq.

WILLIAM AND MARY.

1 Hon. Anchetil Gray, John Coke, esq.
2 Hon. Anchetil Gray, Robert Wilmot, esq.

WILLIAM III.

7 Hon. Henry lord Cavendish, John Bagnold
10 Hon. Henry lord Cavendish, George Vernon, esq.
12 Hon. James Cavendish, Charles Pye, bart.
13 John Harpur, esq. Rt. hon. lord James Cavendish

ANNE.

1 John Harpur, esq. Thomas Stanhope, esq.
4 Hon. James lord Cavendish, Thomas Parker, esq.
7 Right hon. James lord Cavendish, Thomas Parker, knight
Sir Thomas Parker being made lord chief Justice of England, Richard Pye, esq. succeeded him
9 Sir Richard Leving, knt. and bart. John Harpur, esq.
The former being made attorney-general of Ireland, Edward Mundey, esq. was chosen; and Mr. Harpur dying, Nathaniel Curzon, esq. was chosen
12 Nathaniel Curzon, esq. Edward Mundy, esq.

GEORGE I.

Year
1714 Hon. lord James Cavendish, Sir Wm. Stanhope
Violent contest, in which the late members were unsuccessful
22 Hon. lord James Cavendish, W. Bayly, esq.

GEORGE II.

27 Right hon. lord James Cavendish, William Stanhope, esq.
The latter being created a Peer in Nov. 1729, the Hon. C. Stanhope was chosen
34 Right hon. lord James Cavendish 295
Hon. Charles Stanhope..... 286
William Curzon, esq. 223
Richard Harpur, esq. 186
Upon which the two former were declared duly elected; but Charles Stanhope dying Feb. 20, 1735-6, the Hon. John Stanhope (his brother) was chosen
41 Right hon. lord James Cavendish, John Stanhope, esq.
The former accepting a place in March, 1741-2, a strong contest happened, when the numbers were as follow:
William lord viscount Duncannon..... 346
German Pole, esq..... 300
47 Great contest; Lord Duncannon 400
John Stanhope, esq. 400
German Pole, esq..... 251
John Stanhope, esq. dying Dec. 4, 1748, there was a smart contest:
Thomas Rivett, esq. 382
Thomas Stanhope, esq. 311
54 Lord Frederick Cavendish, George Venables Vernon, esq.

GEORGE III.

61 Lord Frederick Cavendish, G. V. Vernon, esq.
The latter being created a Peer in May, 1762, William Fitz-Herbert, esq. was chosen May 5
68 Lord F. Cavendish, W. Fitz-Herbert, esq.
The latter dying, Jan. 2, 1772, there was a contest:
Wenman Coke, esq. 333
Philip Gell, esq..... 208
74 Lord Frederick Cavendish, Daniel Parker Coke
80 Lord George Henry Augustus Cavendish, Edward Coke
84 Lord George Henry Augustus Cavendish, Edward Coke
90 Lord George Henry Augustus Cavendish, Edward Coke
96 Lord George Henry Augustus Cavendish, Edward Coke

1797 Hon. George Walpole, son of lord Walpole, vice Cavendish
1800 Edward Coke, Hon. George Walpole
1 Edward Coke, Hon. George Walpole
6 Edward Coke, William Cavendish, son of lord George
7 Thomas Wenman Coke, of Holkham, on the resignation of his brother, Edward Coke, esq. who accepted the Chiltern hundreds, and William Cavendish
1812 Edward Coke, Henry Frederick Compton Cavendish, another son of lord George
18 H. F. C. Cavendish, T. W. Coke, esq.

GEORGE IV.

20 H. F. C. Cavendish, T. W. Coke, esq.
23 H. F. C. Cavendish, Samuel Crompton, esq.
26 H. F. C. Cavendish, Samuel Crompton, esq.

(No. 9.)

Various Documents relative to the Lead Mines.

THE *Mines and Mineral Productions of Derbyshire* have been the chief source of its wealth, from the earliest ages to the latter part of the last century. It appears evident from the pigs of lead found with Roman inscriptions upon them, that they were wrought by that nation after their conquest of this country; and from manuscripts still extant, we have further proof they have been wrought upwards of eleven hundred years, and they continue to the present day to give employment to many of its inhabitants.

It is asserted, by *ancient* authors, that the lead, tin and copper mines of Great Britain were known to the *Belgians*, *Romans*, *Saxons*, *Danes* and *Normans*, who invaded the kings of this isle, to rob them of their mineral possessions, with the same eagerness as has been evinced by some European princes to gain possession of the gold and silver mines of the South Americans. Some authors assert that queen *Boadicea* extracted much gold out of English minerals and earths; others, that the land of Great Britain contains great quantities of gold.* That the inhabitants of this isle were anciently very careful in defending and securing their mines, is evident from the speech of king *Canutus* to his army, when drawing them up against the Romans. He called upon his soldiers to defend his rich mines, which would be to show themselves Englishmen, truly valiant, tenacious of their rights, and inspired with a due sense of the price of their country and its productions.

The kings of England were always jealous of the mines and minerals; several of whom, after the conquest, would not suffer their mines to be wrought. In 1246, Henry the Third executed a writ of enquiry at Ashbourn, and it was given for the king that the mines in the High Peak, in the county of Derby, and those in the forest of Mendip, in the county of Somerset, were the prerogative royal of the crown, and not the property of those who had by long custom worked them;† but he permitted the miners to proceed till further order, paying

* Moses Stringer, who wrote a Treatise on Mines, in the year 1713, says, Gold, silver, and quicksilver have been procured in considerable quantities in Great Britain, Scotland and Ireland: and at that period these rich productions of the earth were found in the Mendip hills, Somersetshire, called the Golden Rake, and in certain rivers in Scotland and Ireland, gold, in perfect form, like to the Arabian gold, were collected in the same way after hasty rains. The same author tells us that the dominions of Great Britain contain as great a variety of minerals as the same extent of country in any part of the known globe, and after Raymund Lully and Sir George Ripley had largely multiplied gold and silver, the Lords and Commons, not conceiving it safe that the king should have such immense treasure at command, fearing he should become arbitrary and tyrannical, and above asking the aid of the subject, passed an act to prevent the multiplying of gold and silver, making it death to those who attempted it. (This severe act, obtained in the reign of Henry the Fourth, was repealed in the reign of William and Mary, about one hundred and fifty years since) so that those arts were lost, the mines of gold and silver concealed, and the people discouraged from such undertakings, for fear of losing their lives, or forfeiting their lands to the crown.

† A few mines were left by the *Romans*, at the conquest of this isle, under the command of Julius Cæsar, whose descendants continued their work in the lead mines in the High Peak, in the county of Derby; a few about the forest of Dean and Mendip, in the county of Somerset, and some at Finney, in Cornwall; all of which governed themselves by the Belgic and Roman laws in force amongst them, separate from all other subjects of Great Britain, deciding all differences in their own courts by those ancient laws and customs, and not by any law as practised in Westminster-hall.

The Mineral Laws from the first creation of the Society, established in the reign of queen Elizabeth, have been determined by the king or queen in council (as being in, and entirely belonging to, the prerogative of the crown) or in the *Stannary court*, if the *mines* or *works* were in Devonshire and Cornwall, or in the *Barmote court*, if at *Mendip*, in *Somersetshire*, and the *High Peak in the county of Derby*; and if controversies happened within the Societies, amongst any of their members, agents or ministers, they were, and still are to be determined by their own courts; and the aggressor fined and imprisoned by a *precepe* of the same, executed by a serjeant of their own, who is an officer to them, vested with as much power as a messenger to the king, or a tipstaff to the courts at Westminster-hall. All matters in controversy are decided by their own laws in these courts, and if the party sued thinks himself aggrieved, he is free to appeal to the king in council, where the cause is again debated and finally determined before a committee of the general council, summoned for that purpose, viz. The lords of the cabinet council, who are also members of these Societies, as likewise are the lord chancellor, the lord chief *baron* of the exchequer, and the two lords chief justices, who are commonly summoned to assist in those cases: which lords are barriers or guarantees to keep the Societies from being too severe upon, or oppressing the subject. Here the matter is set at rest without the tedious, expensive and precarious methods of the common law.

to him the thirteenth dish, cope and lot, which further order was extended by other kings to Philip and Mary; and queen Elizabeth's grant to the Corporation of Mine, Mineral and Battery Works of the City of London, which Society were to take possession of all the said lead mines, ewers, &c. whatsoever, in all her dominions, on the former duty paid to the *crown*, and to be accountable to the *crown* for the lead, &c. with full power and authority to them only to exercise their inventions, and to work the said *mines* or *minerals*; exempting all others from working the same without license from the said Society.

The mines in this country are mostly under the prerogative of the crown. All the kings from the conquest to Edward the Third, refused to make grants of the mineral productions of the kingdom to the subject, neither did they so much as set a lease of any part of them. And those kings who did afterwards grant leases to the subject, were so jealous, that they made them only for a short period, and under very great restrictions and high duties; as appears by the records of Edward the Third, Richard the Second, Henry the Fourth and Sixth, Edward the Fourth, and Henry the Seventh, set forth in *Sir John Pettus's Fodinæ Regales*, from page 12 to 20, where they are particularly recited, with the number, roll and date.

King Edward the First, in the sixteenth year of his reign, inquired into his *mineral affairs*; and being informed that the said miners continued to work them as aforesaid, caused a writ of Enquiry to be executed, bearing date the 28th of April, attested by his cousin, Edmund Earl of Cornwall, at *Westminster*, see the *Rolls* in the *Exchequer*. After the return of the said writs, the king suffered the miners to enjoy the ancient privileges of their own laws and their mines, until his will and pleasure be further known; but making no declaration therein, they remained until the 3rd of Edward the Sixth. At which time a writ was executed at the *Great Barmote Court*, held the 28th of September, in the said year of his reign, before *Francis* Earl of *Salop*. The report was similar to the former; and the miners were permitted to continue to work the mines, until the king's further pleasure; and no alteration took place as in the inquisition made. In the reign of *Philip and Mary*, the reports were as the former. King Edward the First gave the tinners some new laws, and called them *Court Parliament of Stannaries.*

From the Bundle of the Exchequer, and the Inquisition of the sixteenth year of the reign of Edward the First.

DERBY. *Edward*, by the grace of God, king of England, lord of Ireland, and duke of Acquitain, to the sheriff of the county of Derby, greeting; Know ye that we have assigned our faithful and well-beloved *Reynold of the Ley* (Lea) and *William of Memill* (Meynell) to inquire by the oaths of good and lawful men, of your county, by the which the truth may be best known, of the liberty which our miners do claim to have in those parts, and which they have hitherto been used to have, and by what means, and how, and from what time, and by what warrant. And therefore we do command, that at a certain day and place, which the said Reynold and William shall appoint thee, Thou shall cause to come before them so many, and such good and lawful men of thy bailiwick, by the which may there the best be known in the premises by the inquiry, and that thou have there the writ. Witness our well-beloved cousin, *Edmund* Earl of *Cornwall*, at *Westminster*, the 28th day of April, in the sixteenth year of our reign. By *William* of *Hambleton*, and at the instance of *Hugh* of *Cressingham*, the day is appointed at ASHBOURN, upon Saturday next after the feast of the *Holy Trinity.*

An Inquisition taken at *Ashbourn* upon *Saturday* next after the Holy Trinity, in the sixteenth year of the reign of Edward the First, before *Reynold of the Ley* and *William of Memil*, of the liberties which the miners of our sovereign lord the king, in the Peak, do claim to have hitherto used to have in those parts, by what means, and how, and from what time, and by what warrant. By the oaths of the following

JURORS,

Thomas Foliamo,	Clement Ford,	William son of the smith of Bradwell,
William Hawley,	William of Bradlaw,	Henry Foljambe,
Ralph Cotterell,	Peter of Rowland,	John of Longsden.
William of Longsden,	Richard of Longsden,	
John Tearture,		

1st. Who say upon their oaths, that in the beginning, when the miners did come to the field seeking for a mine and finding a mine, they do come to the bailiff, which is called

The Courts of the Mines Royal, &c. proceed against *aggressors* who are neither *members* or *agents*, by first sending a *summons* to the party to attend their *court*, to answer to that alleged against them; which, if they refuse to do, and will not submit to, or obey the authority and order of the court, it is customary to crave a warrant from the *council board*, to empower one of his majesty's pursivants to seize the body of the offender or offenders, and bring him or them before the council, to answer his or their said contempt and trespass, which he or they must there make full satisfaction for, or go to prison.

Burghmaster, and did desire (if it were a new field) that they might have two meers of ground, that is to say, one for the finding thereof, and the other by the miner's fine, viz. paying a meer dish of his first ore.

2nd. And the miners desired also in an old work of right to be measured to the said miners, every meer to contain four measures, and the hole of the mine to be seven feet wide or broad.

3rd. And every measure shall be of twenty-four feet, and the king shall have the third meer next the finder, and the other two meers shall be delivered to the workman, finder of the new mine, by the burghmaster.

4th. And in an old field every workman, demanding such work, one meer in the field next our sovereign lord the king.

5th. And the king shall have the thirteenth dish or measure of ore, which is called the lot.

6th. And this hath been used, and for this our sovereign lord the king shall find unto the miners free ingress and egress into and from their mines, to carry and bear their ore unto the king's highway.

7th. And the jury do say, that they are used for coming in mines, that our sovereign lord the king shall have the buying of their ore before all others, giving as an other will.

8th. And if the miners have received any money of any other man beforehand for his ore, then the miners shall pay their debts without any let of burghmaster, so that this be without fraud or deceit, or else the king shall have ore before all others.

9th. And the jury say further, upon their oaths, that it is, and shall be lawful to the miners to sell, give and assign his groove or meer of ground, or any part thereof, without the license of the king or burghmaster.

10th. And this hath been used time out of memory of man, in all the territories and liberties of the High Peak, unto this time, save in a certain place there called Man Dale, in which place all buyers of ore, are prohibited to buy ore by the space of four years last past by the burghmaster.

11th. And for what cause the miners may maintain their right and customs above the jury do say, that the ancient custom of the mine is, that the Pleas or Courts of the Burghmaster ought of right to be kept and holden yearly upon the mines from three weeks to three weeks.

And the jury say, upon their oaths, that if any miner be slain by any misfortune, that such miner be buried (without the view of the coroners of the said county) by the view of the miners.

And if any person or persons be convicted of any small trespass, he ought to pay for his amercement two pence, and that to be the same day paid, or else to double the same amercement till it come to 5*s.* 4*d.*

If any blood be shed upon the mine, the author shall pay 5*s.* 4*d.* the same day, or else shall double the same every day till it come to 100*s.*

And if any miner do any trespass under the ground to his fellow, he shall pay for his amercement 5*s.* 4*d.* and satisfy his fellow, the full value of his trespass.

In Nomine Dei. Amen.

First time that the new mine was found, the merchant and the miners chose them a burghmaster, for to deliver unto the finder of the mine two meers, and the lord of the field a meer next to the said two meers on the one party, or else half of a meer on the one side of the said meer, and another half on the other side, at his own election, and after that the burghmaster shall deliver to the miners, meers to work, after the law of the mine.

King Edward the Fourth, 20th December, in the eighth year of his reign, grants all mines of gold and silver, and lead holding gold or silver, to Richard Earl of Warwick, John Earl of Northumberland, and others, on the north side of the *Trent*, within England; (agreeing with the owners of the soil) to hold from the feast of the Purification next for forty years; paying to the king the twelfth part of pure gold and silver, and to the lord of the soil a sixteenth part as they grow; liberty to dig, &c. except under houses or castles, without license.

King Henry the Seventh, by his letters patent, dated 27th Feb. Anno Regni. Rot. 92, makes *Jasper* Duke of *Bedford*, and other *Earls*, *Lords* and *Knights*, commissioners and governours of all his mines of *gold*, *silver*, *tin*, *lead* and *copper*, in *England* and *Wales*, to answer the profits to the king; and made Sir *William Taylor*, comptroller, to hold from Candlemas-day following for twenty years; with liberties of court and other privileges, paying to the king the fifth part of pure gold and silver, and to the lord of the soil the eleventh part, as it grows, liberty to dig and search, &c. except under the houses and castles of the king and his subjects. This wise prince by these means raised a vast sum of money, and left his rich coffers to Henry the Eighth, who added to the bulk by the sale of abbey lands, &c. But before his death, he had consumed almost all the treasure his father had accumulated and his own; leaving but scanty remains to his successor, Edward the Sixth, an infant, whose short reign and inexperience were not calculated to refill Henry the Eighth's empty coffers. But queen Mary, by marrying Philip of Spain, became interested in the wealth of Europe, so needed no other support; so that the mines stood neglected for above seventy years, except the following Inquisition.

Inquisition held at Wirksworth, in the reign of Edward the Sixth, in the third year of his reign.

Cur' Magnæ Barmot' Tent' apud Wirksworth, Coram Francisco Com' Salop', 20 die Septembris, Anno Regni, Edwardi VIth, &c. Tertia Inquisitio Magna pro Domino Rege Miner' infra Wapentag' predict' per Sacramen'.

JURORS,

Nicholas Hydes,	William Leigh,	Thomas Cockshotte,	Henry Spencer,
Robert Cotton,	John Spencer,	Thomas Woodwis,	Ralph Houghton,
William Bennitt,	Thomas Bramwell,	Thomas Wood,	Oliver Stone,
Thomas Steeple,	John Gratton,	James Hall,	Roger Malte,
Edri. Robotham,	John Somers,	Roger Gell,	Edward Willie,
Henry Storer,	Richard Wighley,	John Storer,	William Shawe.

The report of the jurors was similar to the former made at Ashbourn.

The following Inquisition was also held at Wirksworth.

Cur Magnæ Barmot Reginæ, tent' apud Wircksworth, 3 Maii, Annis Regni, Philippi & Mariæ, Dei gracia, Regis & Reginæ, Angliæ, Hispaniæ, Franciæ, &c. tertia & quarta Inquisitio Magna pro Domino Rege, et Dominâ Reginâ pro Miner' infra Wapentage, predict' secund' constuetud' ibidem usitat' per Sacramen.

JURORS,

Richard Cadwin,	Robert Alleynsea,	John Wright,	John Norman,
Henry Smith,	Henry Mycock,	Michael Keight Holm,	William Robotham,
Richard Winfield,	John Steeple,	Lawrence Supper,	Thomas Wood,
Henry Spencer,	William Ballance,	Roger Marlee,	Thomas Needham,
William Sands,	Thomas Bennet,	Roger Tipping,	John Pickocke,
Richard Hilton,	Thomas Bennet,	Richard Wigley,	Thomas Jones.

The report of the jurors was the same in substance as those before delivered.*

Queen Elizabeth established her prerogative, and set all sorts of *mines* and *minerals* in her dominions to the two *corporations* of the *Mines Royal* and of the *Mineral* and *Battery Works* for ever, supported by the highest power of Her prerogative she could give them. Which *mines* and *works* were granted and confirmed, by Her and Her successors in ten several *patents* and *charters* under the great seal of England, with the authority of parliament.

Under these Societies many persons took leases and licenses to work; many of whom, after their leases terminated, not being strictly looked after, continued to work them.

These persons were much favoured by the rebellion and usurpation of Cromwell; which interrupted the Societies' affairs; so that, by length of time, the common people fancied all mines of right belonged to such *usurpers;* when, in reality, there is not any mine in the subject, but what was granted by *queen Elizabeth* to those *Societies.* All *mines* and *minerals* whatsoever, wrought in any part of her majesty's dominions, by any other than these *Societies,* their *agents* or *tenants,* are direct encroachments upon, and concealments from, the *crown of Great Britain and Ireland.* *Moses Stringer.*

Queen Elizabeth, on the 10 Oct. in the sixteenth year of her reign, invited over foreign chemists and mineral masters, to instruct her subjects in the mineral arts and sciences, then but very little known in England. And in consideration of leaving their native places and settling themselves in her realms, for this purpose she did, by her letters patent, grant; First, to *Cornelius Deooz* all the *alom, coperas* and all other mineral earths and metals, in England and its confines, that he should find in earth and in ground, in digging for the same without fraud. To *Daniel Houghsetter,* she joined *Thomas Thurland,* master of her hospital of the Savoy, to whom she granted all the gold and silver, copper and quicksilver, in Yorkshire, Lancashire, Cumberland, Westmoreland, Cornwall, Devon, Gloucestershire, Worcestershire,

* *Cases decided.* The earl of Northumberland had a grant from king Philip and queen Mary, of certain manors, together with all mines within the said manor. The Societies for Mines had wrought the said mine as a copper mine, and being opposed by the earl, brought the question to trial; the issue may be found in Plowden's Cases. The question was, Whether the king, granting the manor to the earl, with all the mines within the said manor, the mines also should pass. This question was resolved by the judges, That though the grant of the manor was good, yet the king could not alienate mines, being perfectly linked with the prerogative of the crown. The same decision was made in the reign of Charles the First, in a dispute between Sir Hugh Middleton, tenant to the Corporation for the mines in Wales, and Sir Richard Price, concerning the mines at Tallabont, in Wales.

and Principality of Wales. To the other famous chemist and mineral master general, *Christopher Schutz*, she joined *Mr. Humphreys*, essay master of her mint, in the tower of London, she grants all minerals, earths and metals, pearls and gems, and whatsoever treasures were likely to be found, in earth or in ground, in any parts of her dominions for ever, exclusive of all others, with full power to erect all sorts of mineral and battery works; the sole use of the *calamine stone*, making of *brass*, working plates, rods, hoops, wire, &c. of iron, steel, copper and brass. To the said patentees her majesty joined her prime ministers of state, the chief of her nobility, and several wealthy merchants and citizens of London, into bodies corporate for ever; and so in succession they remain to this day, by the names of the Governors, Mineral Master General, and Assistants of the City of London, of and for the Mines, Mineral and Battery Works. Who therefore covenanted to pay unto her majesty certain rents, parts, shares, pre-emptions, &c. And her majesty covenanted for herself, her heirs and successors, to and with the said grants and corporations, to obstruct and hinder all other her subjects, or others, to dig or search for the said minerals, or to use their tools, instruments, engines, &c. for gaining the same, or their sewers for cleansing *lead ore*; or, the engines, hearths, furnaces, or methods of *stamping*, *roasting*, *boiling*, *smelting*, *melting or refining of gold*, *silver*, *copper*, *quicksilver*, *tin*, *lead*, *iron* and making *steel*. And her majesty grants the sole power of digging and use of the *calamine stone*, transmuting copper into latten and fine brass, and of straining copper, iron, steel, brass, &c. &c. to the said body corporate. Her majesty also grants full power, commission, license and authority to the said William Humphrey and Christopher Shutz, their heirs, &c. for ever, by themselves, their servants, workmen, &c. to search, dig and mine for the said *lapis calaminaris*, or calamine stone, in all places of our realm of England, and certain parts of Ireland, and the sole use of the same, allowing a twentieth part to the queen. Nevertheless, the said William Humphreys and Christopher Schutz, their heirs and assigns, shall not search, dig, mine under, or work in any houses, edifices, gardens, orchards, or courts joining to houses, or in any close ground, inclosed with walls, belonging to any subject, without the good-will and consent of such as have power to license them so to do; and the said W. H. and C. S. their heirs and assigns, shall also reasonably satisfy, recompense and make amends to all and every owner, farmer, or possessor of all and every the lands, grounds and possessions aforesaid, of and for all such damage and losses as by them, or any of them, from time to time, shall be committed or done, to the detriment of any grass, corn, woods, quarries, or any other profit or commodity whatsoever, usually before taken and enjoyed, or that in right might have been taken and enjoyed, in or upon the same ground, soil, &c.* This grant also prohibits all others from getting the calamine stone; and makes it six months imprisonment to hinder or disturb the aforesaid works, without bail or mainprize and the forfeiture of £100. of lawful money of England, &c. Dated 27th of Sept. in the seventh year of the reign of our sovereign lady queen Elizabeth, &c.

A true Copy of the Charter, granted to the Corporation of Mines, Mineral and Battery Works, 7th Elizabeth.

To all and singular, as well noble and gentlemen as others, to whom these presentes shall come, be seene, hearde, read, or understood; Sir Gilbert Dethicke, knight, alias garter principall kinge of armes; Robert Tooke, esq. alias clarencieulx kinge of armes of the southe partes of Englande; and William Flower, esq. alias norroy kinge of armes of the northe partes of Englande, sendith greetinge in our Lorde God everlastinge. For as muche as auncyently from the beginninge, the valiaunt and vertuous actes of excellent personnes have ben commended to the world and posterity with sondrey monumentes and remembrances of their desertes; amongest the which the chiefest and most usual hath ben the bearinge of signes in shyldes called armes, being none other thinges then evidences and demonstrations of prowesse and valour; diversli distributed accordinge to the qualites and good deseartes of the personnes merytinge the same. To the intent that such as have done commendable service to their prince or contrey, eyther in warre or peace, by ingenious devyces founde out to the common benefite of the weale publique, might thereby receyve due honor in their lives, and also deryve the same successively to their posterity for ever. And whereas the Right Honorable Sir Nicholas Bacon, knight, Lorde Keeper of the Great Scale of Englande; Thomas Duke of Norfolke, Earle Marischall of Englande; William Earle of Pembroke; Robert Earle of Leycester; William Lord Cobham; Sir William Cecil, knight; Sir Walter Mild-

* The Society, or Corporate Body, by queen Elizabeth's charters, are bound to give recompence for damage done to the soil and herbage in working their mines to the proprietors or lords of the soil. If the Society, or their assigns, work a mine, or set up any mineral work upon any person's estate, they are obliged to pay for the use of such land or water course as they shall have occasion for, what six persons of the neighbourhood (three chosen by each party) shall think reasonable to allot; but in case they cannot agree, it is finally to be limited by the king or queen in council.

Any lord or proprietor of land may have the privilege of working the mines on his own estate if he desire so to do, first agreeing with, and taking a lease and license from, the Society, and giving security to pay the king's share and parts.

may, knight; Sir Henry Sidney, Knight of the most honorable Order of the Garter; Sir Francis Jobson, knight; Sir William Gerrarde, knight; Rowlande Heywarde, of London, alderman; John Tamworthe; Peter Osborne; Thomas Cecill; Fraunces Agarde; Thomas Fleetwoode; William Burde; William Robertes; Henry Codenham, esquires; Robert Christmasse; Roger Wetherell; William Paten; Christopher Chowte; Thomas Smithe; William Dodington, gentlemen; George Barne; William Humpfrey; Christopher Shutz; Anthony Gamage; Richard Marten; Edmonde Roberts; Fraunces Barty; Edward Castelyne; John Goodriche; John Louisson; William Williams; Christopher Birckebecke, and Andrew Palmer, citizens of London, be incorporate by the most noble and excellent princess Elizabeth, by the grace of God, queene of Englande, France and Irelande, Defender of the Faith, &c. by the force of her majesty's letters patentes, bearinge date at Westminster, the 28th day of May, in the tenth year of her majesty's reigne, By the name of Governours, Assistantes and Societie for the Mineral and Battery Workes, and to be one body politique within itself incorporate; and to have a perpetuall Societie of themselves, bothe in deede and name, and so to have succession and continuance for ever. And further to have one common seale to be used for their necessary affayres as occasion shall serve; as more plainly appeareth in the saide letters patentes. In consideration of the same, and for a further declaration of the worthyness of the sayde Governours, Assistantes and Societie of the sayde fellowship for the Mineral and Battery Workes, and at their instant requestes, we the sayde Kinges of Armes, by power and authority to us committed by letters patentes under the Great Seale of Englande, have assigned, given and granted unto the saide Governours, Assistantes and Societie now beinge, and to their successors beinge hereafter Governours, Assistantes and Societie for the sayde Mineral and Battery Workes, these armes, creast and supportes following: that is to say, the fielde assure, on a mount vert a pillar of brass, between a lion rampant gardaunt and a dragon rampaunt golde; in the chief a rynge of laten wyer between a bezaunt and a plate; upon the heaulme on a goree argent and sable, two naked armes sustayninge a calamine stone in proper colour; mantellede assur doubled golde; supported with the personnages of Science and Labour, she holdinge in her right hande a rodde representinge *virgulum divinam;* and Labour holdinge in his left hande a hammer; and on either of their heades a crescent, signifyinge encrease in Science by Labour; all in their proper colour, as more plainly appeareth depicted in this margent. Which armes, creast and supporters, and every part and parcell thereof, we, the sayde Garter, Clarencieulx and Norroy, kinges of armes, do by these presentes ratify, confirme, give and graunt unto the saide Governours, Assistantes and Societie and to their successors hereafter beinge Governours, Assistantes and the Societie for the sayde Minerall and Battery Workes for ever. And they, the same armes, creast and supporters, to have, holde, use, beare, enjoy and shew forthe in shylde, seale, banner or otherwise, at all times, and for ever hereafter at their liberty and pleasure, without let or interruption of any person or persons. In witness whereof we, the sayde Garter, Clarencieulx and Norroy, kinges of armes, have to these presentes subscribed our names, and sett thereunto the severall seales of our armes, the 20th day of Februarye, in the yere of our Lorde God a thousand five hundrede and sixty-nyne; and in the seventh yere of the reigne of our sovereigne Lady Elizabeth, by the grace of God Queen of Englande, France and Irelande, Defender of the Faith, &c.*

G. Dethicke, alias Garter Principal, King of Arms	Robert Tooke, alias Clarencieulx, Roy d' Armes	Permoy William Flower, alias Norroy, Roy d' Armes.

Form of a Commission, relating to the Society for Minerals, &c.

To all persons to whom these presents shall come, greeting. Whereas, by several letters patent and charters granted to the Governours, Assistants and Society of the City of London, of and for the Mineral and Battery Works, for all mines, minerals, earths and metals, in all parts of his majesty's dominions and realms, and the confines thereof whatsoever and wheresoever; granted to them as a body politick and incorporate, to hold continuance for ever to them and their successors in all the various branches thereof, with many excellent powers, protections and privileges, given to them, their agents, officers and servants, in divers grants made by her late glorious majesty, queen Elizabeth, in the 7th, 10th and 26th years of her reign, and by king James in the 1st year of his reign; allowed by all the succeeding kings and

* Queen Elizabeth, after a considerable progress made in mineral affairs and grants given of great consequence to the crown, ordered. That Sir Nicholas Bacon, then lord keeper, the Duke of Norfolk, William Earl of Pembroke, Robert Earl of Leicester, William Lord Cobham, Sir William Cecill, Sir Walter Mildmay, Sir Henry Sidney, Sir Francis Jepson, Sir William Gerard, with twenty-nine more considerable persons, gentlemen, lawyers, citizens and foreigners to be participants. And this Society consisted of thirty-six shares, subdividable also into half and quarter parts, so that it was capable of one hundred and forty-four shares. And all this being a joint stock, did effect great things which turned to good account, both to the queen and the society.

The Mines Royal had only the gold, silver, copper and quicksilver granted to them. The Company of Mineral and Battery Works had the lead and other minerals in those mines; with all other minerals, earths and metals whatsoever and wheresoever granted to them; these corporate bodies were united.

queens of this realm, and confirmed by sundry acts of parliament now in force. Now know ye, That we, the said Governours, Assistants and Society aforesaid, reposing great trust and confidence in have, by authority, and in pursuance of the said letters patent, charters and acts of parliament constituted, authorized and appointed him, the said to be a surveyor, searcher and serjeant for inspecting into all fullers' earth and fulling clay, and tobacco-pipe clay, in the county of Surry, or in any other county or place, parts or places, as we, the said Governours, Mineral Master General, Assistants and Society shall from time to time direct or appoint, to prevent the same from being exported to parts beyond the seas; and to prevent, hinder and stop all such minerals, called fullers' earth, fulling clay and tobacco-pipe clay, with all other earths, clays, chalk, sand, gravel, or any other mineral earths, stones and fossils, or metalick bodies whatsoever, from being dug, raised, used, carried away, or made into any sort of manufacture whatsoever, without permission and license first had and obtained from the said Governours, Mineral Master General and the said Corporation; and give information of all trespasses, frauds and injuries done or committed to the prejudice of his Majesty, or the said Corporation, their agents, officers and servants; and to do and perform all things to the said office or employment appertaining as becometh him, according to such instructions as the said now hath, or hereafter shall receive from the said Society, or their Mineral Master General, pursuant to the direction of the said letters patent, &c. giving him, the said all the protections therein mentioned for the securing his person from all insults, arrests, imprests, actions and parish offices whatsoever. Hereby desiring and requiring all his majesty's judges, sheriffs, justices of the peace, mayors, bailiffs and all other his majesty's officers civil and military, to be at all times aiding and assisting to the said in the due execution of this our commission, as becometh them. Given under the common seal of our Corporation, at the Mineral Office, Royal, London, by order of the court, this day of in the year of the reign of our Sovereign Lord the King, A. D. ———.

King James the First, in the first year of his reign, confirmed and enlarged the grant for mines and minerals to the said Corporations.

King Charles the Second, after his restoration, nursed these Societies; and in order to strengthen them, erected two Royal Societies or Companies, one called the Royal Society, whose office was to encourage arts and inventions, and to entertain such foreign artists as should come over. The other, called the Royal African Company, was to fetch gold from those climates where nature is found to be profuse in her golden productions, and to furnish the American isles and plantations with negro slaves. During this king's reign some interesting trials respecting mines took place. Sir Carbery Price claimed the lead mines on his estate in Wales against the Societies' claim on the lead mines in Wales. This cause was tried in Westminster hall,* and Sir Carbery Price obtained his suit. In consequence of the success of Sir Carbery Price, Sir Humphry Mackworth and others applied for, and obtained an Act of Parliament.

King William granted to the Corporation all minerals of lead, copper, tin and iron, and all other inferior metals (inter alia) and repealed the statute, made in the fifth year of Henry the Fourth, against the multiplying of gold and silver, &c.

King William and queen Mary passed an Act, in the fourth year of their reign, to prevent disputes and controversies concerning Royal mines. It is amongst other things enacted, That no mine of tin, copper, iron or lead, shall be adjudged hereafter a Royal mine, although gold or silver may be extracted out of the same. That all and every person and persons, being subjects of the crown of England, bodies politick or corporate, that now are or shall hereafter be, the owner or owners, proprietor or proprietors of any mines within the kingdom of England, dominion of Wales, or town of Berwick-upon-Tweed, wherein any ore now is, or hereafter shall be, discovered, opened, found or wrought, and in which there is copper, tin, iron or lead, shall, and may hold and enjoy the same, and continue in the possession thereof, and dig and work the said mine or mines, &c. The king to have the preference of the ore at the prizes affixed: viz.

	£.	s.	d.	
For all copper ore, washed and made clean for the merchant...	16	0	0	per ton
For all tin ore, ditto	2	0	0	
For all iron ore, ditto	2	0	0	
For all lead ore, ditto	9	0	0	

In default of payment within thirty days after the ore is laid on the bank, then the proprietors are at liberty to dispose of their ore, to their own use.

* It was proved on the above trial that the Derbyshire ore yields two grains of silver in a pound weight. The ore procured in the mines in Cardiganshire yields from five to sixty grains in a pound weight of lead.

Sir H. Davy's Safety Lamp.

THIS Lamp of Safety, for coal mines, is the invaluable and splendid invention of Sir H. Davy. We shall here describe its construction.

In the parts of coal mines where danger was apprehended from fire-damp, miners had been accustomed to guide themselves, or to work, by the light afforded by the sparks of steel, struck off from a wheel of flint. But even this apparatus, though much less dangerous than a candle, sometimes produced explosions of the fire-damp.

A perfect security from accident is, however, offered to the miner in the use of a safe lamp, which transmits its light, and is fed with air, through a cylinder of iron or copper wire gauze; and this fine invention has the advantage of requiring no machinery, no philosophical knowledge to direct its use, and is made at a very cheap rate.

The apertures in the gauze should not be more than one-twentieth of an inch square. As the fire-damp is not inflamed by ignited wire, the thickness of the wire is not of importance, but wire from one-fortieth to one-sixtieth of an inch in diameter is the most convenient.

The cage or cylinder should be made by double joinings, the gauze being folded over in such a manner as to leave no apertures. When it is cylindrical, it should not be more than two inches in diameter; for in larger cylinders, the combustion of the fire-damp renders the top inconveniently hot; and a double top is always a proper precaution, fixed one half or three quarters of an inch above the first top.

The gauze cylinder should be fastened to the lamp by a screw of four or five turns, and fitted to the screw by a tight ring. All joinings in the lamp should be made with hard solder; and the security depends upon the circumstance, that no aperture exists in the apparatus, larger than in the wire gauze.

The parts of the lamp are,

1. The brass cistern which contains the oil, pierced near the centre with a vertical narrow tube, nearly filled with a wire which is recurved above, on the level of the burner, to trim the wick, by acting on the lower end of the wire with the fingers. It is called the safety trimmer.

2. The rim, in which the wire gauze cover is fixed, and which is fastened to the cistern by a moveable screw.

3. An aperture for supplying oil, fitted with a screw or a cork, and which communicates with the bottom of the cistern by a tube; and a central aperture for the wick.

4. The wire gauze cylinder, which should not have less than six hundred and twenty-five apertures to the square inch.

5. The second top three quarters of an inch above the first, surmounted by a brass or copper plate, to which the ring of suspension is fixed.

6. Four or six thick vertical wires, joining the cistern below with the top plate, and serving as protecting pillars round the cage.

When the wire gauze safe lamp is lighted and introduced into an atmosphere gradually mixed with fire-damp, the first effect of the fire-damp is to increase the length and size of the flame. When the inflammable gas forms as much as one-twelfth of the volume of the air, the cylinder becomes filled with a feeble blue flame, but the flame of the wick appears burning brightly within the blue flame, and the light of the wick augments till the fire-damp increases to one-sixth or one-fifth, when it is lost in the flame of the fire-damp, which in this case fills the cylinder with a pretty strong light. As long as any *explosive* mixture of gas exists in contact with the lamp, so long it will give light, and when it is extinguished, which happens when the foul air constitutes as much as one-third of the volume of the atmosphere, the air is no longer proper for respiration; for though animal life will continue where flame is extinguished, yet it is always with suffering. By fixing a coil of platinum wire above the wick, ignition will continue in the metal when the lamp itself is extinguished, and from the ignited wire the wick may be again rekindled, on going into a less inflammable atmosphere.

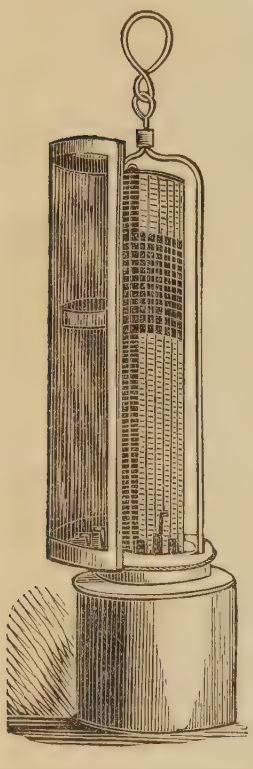
"We have frequently used the lamps where the explosive mixture was so high as to heat the wire gauze red hot; but on examining a lamp which has been in constant use for three months, and occasionally subjected to this degree of heat, I cannot perceive that the gauze cylinder of iron wire is at all impaired. I have not, however, thought it prudent, in our present state of experience, to persist in using the lamps under such circumstances, because I have observed, that in such situations the particles of coal dust floating in the air, fire at the gas burning within the cylinder, and fly off in small luminous sparks. This appearance, I must confess, alarmed me in the first instance, but experience soon proved that it was not dangerous.

"Besides the facilities afforded by this invention, to the working of coal mines abounding in fire-damp, it has enabled the directors and superintendents to ascertain, with the utmost precision and expedition, both the presence, the quantity, and correct situation of the gas. Instead of creeping inch by inch with a candle, as is usual, along the galleries of a mine suspected to contain fire-damp, in order to ascertain its presence, we walk firmly on with the safe lamps, and, with the utmost confidence, prove the actual state of the mine. By observ-

ing attentively the several appearances upon the flame of the lamp, in an examination of this kind, the cause of accidents which happened to the most experienced and cautious miners, is completely developed; and this has hitherto been in a great measure matter of mere conjecture.

"It is not necessary that I should enlarge upon the national advantages which must necessarily result from an invention calculated to prolong our supply of mineral coal, because I think them obvious to every reflecting mind; but I cannot conclude without expressing my highest sentiments of admiration for those talents which have developed the properties, and controlled the power, of one of the most dangerous elements which human enterprise has hitherto had to encounter."—See Letter to Sir H. Davy, in Journal of Science, Vol. I. p. 302. by John Buddle, esq. generally and justly esteemed the most scientific coal miner in the kingdom.

Dillon's improved Safety Lamp.



Mr. Dillon has lately introduced to the notice of the scientific world, an improvement upon the *Safety Lamp* of Sir Humphry Davy, which appears to us of sufficient interest for illustration. As the *Davy Lamp* is too well known to need special description here, it will be merely necessary to allude to the principle of the invention, in order to point out Mr. Dillon's improvement.

He maintains, in opposition to Sir Humphry Davy, that the Davy lamp acts by its heat and rarefaction, and not from Sir H. Davy's theory, that flame is cooled by a wire-gauze covering. He shows, by a simple experiment, that the Davy lamp is not safe in a current of hydrogen or carburetted hydrogen gas, and that many lives may have been lost from the confidence of miners in its perfect safety. A current of hydrogen or carburetted hodrogen gas steadily directed on the flame of the lamp from a bladder and stopcock, *by cooling the wire gauze*, brings the flame of the lamp through the gauze to the mouth of the stopcock (even should there be six folds of gauze intervening.) He shows also, by immersing the lamp, when cold and newly lighted, into a jar of dense hydrogen or carburetted hydrogen gas, or an explosive mixture with atmospheric air, that explosion takes place inside and outside of the lamp; whereas, when the lamp has burnt sufficiently long to heat the wire gauze, no explosion takes place on the outside of the lamp. These experiments appear incontrovertible in support of his theory, which is, "*that the wire gauze is merely the rapid receiver and the retainer of heat, and that it is the caloric in its meshes which prevents the flame of the lamp from being fed by the oxygen of the atmosphere on the outside.*"

The experiments of Libri, showing that flame is inflected by metallic rods, and that "when two flames are made to approach each other, there is a mutual repulsion, although their proximity increases the temperature of each, instead of diminishing it," support Mr. Dillon's theory—the inflection being occasioned by the rarefaction of the air between the rod and the flame, the latter seeking for oxygen to support it in a denser medium, the two flames repelling each other for the same reason, and not from any mysterious and "repulsive effect of the wires of the gauze tissue." Mr. Dillon increases the heat of the lamp, and places on it a shield of talc to protect it from a current, and, upon his theory, the shafts or workings of iron and coal mines may be lighted with gas with perfect safety, protecting the flame with wire gauze and a circular shield of talc.

We have been favoured with the following letter, on the subject of the Fire-damp and Sir H. Davy's Safety Lamp, from the learned Chemist and Lecturer, Mr. Murray, F. S. A. F. G. S., &c. &c.

Derby, 1st October, 1828.

Sir,

Agreeably to your request to me, I beg now to give you a few cursory remarks on the production of fire-damp (the protocarbonated hydrogen of modern chemists) in mines, and Sir H. Davy's Safety Lamp.

Davy ascribes, as Mr. Langmire had done before him, the production of fire-damp in coal mines to the *high pressure under which it is assumed coal has been formed.* All this, however, is vague conjecture ; and hypothesis happily now receives but little attention or respect, and this dogmatism, in reference to the first creation of coal, but ill becomes the character of those who assume the Philosophy of Bacon as the standard of appeal in matters of Science.

As the fire-damp is most abundantly liberated in the vicinity of *faults* or *dykes* which abrupt the strata and crumble the coal, it seems to me most accordant with observed facts to ascribe the liberation of fire-damp (from the coal itself) to their mechanical agency—and *cæteris paribus* the amount of this accumulation in coal mines will be in some ratio with the numerical amount or extent of such dislocations.—Thus, too, a piece of coal, simply broken under water, will evolve bubbles of this inflammable gas.

I was the first individual who ever proposed a safety lamp for mines. Its principles were founded on the *low specific gravity of the carbonated hydrogen.* It was an air-tight lamp, supplied with air from the *floor of the mine.* This proposition will be found in the first edition of my Elements of Chemical Science, published in June, 1815, and in November following the late Dr. John Murray, of Edinburgh, adopted the same plan. In reference to the principal of safety in Sir H. Davy's wire gauze lamp for mines, it is assumed by its inventor that it is entirely and exclusively dependant on a presumed *cooling influence.* This view of it, however, is at best problematical, and is one which I have combated from the period of its introduction to the mining world.—Having had the *wire gauze* which composes the cylinder *red hot* in the fiery wastes of the mine, I do own I cannot comprehend an idea of *cooling* influence as applicable to *red hot wire*, and I moreover formed a *safety cylinder of muslin*, having previously dipt it into *phosphate of ammonia* to prevent its ignition by flame, and this I proved to be equally safe with the wire gauze.

Towards the close of last year I gave a course of Chemical Prelections in Belfast, wherein I stated these views, accompanied also by new illustrations on the structure and phænomena of flame. Since that period I perceive that a gentleman (Mr. Dillon) of that town has much improved the safety lamp of Sir H. Davy by the attachment of a semicircular shield of talc, which *prevents* the *cooling* of the wire gauze by forming a countercheck to the current of the mine.

The phænomena of safety appear to me ascribable to a compound cause—the *rarefaction by heat* of the gaseous elements of explosion and an admixture of a portion of the products of combustion evolving from the flame of the wick.

The truth is, that the safety lamp, when *first lighted* and the wire gauze is *coldest*, is *unsafe*, but when heated it is on the contrary safe.

From a very early period of the enquiry I pointed out the great danger which would ensue from using *copper* wire gauze as the cylindrical tissue of the safety lamp. *Iron wire* must be alone employed, since I found that the flame of the fire-damp assumed a *green tint* when burning within a safety lamp constructed of copper wire, and in one instance, in my hands, it had *nearly burnt its way out.*

I am,
Sir,
Yours most obediently,
J. MURRAY.

Mr. Glover.

Having resided upwards of eight years at Wirksworth, the capital of the mineral district in this county, and having during that time received the friendship of some of the principal lead merchants and agents, and experienced the civility of all the miners, I feel interested for their welfare ; this induced me to give as full an article on the mines as the limits of this volume would permit; to extract the particulars of *Sir H. Davy's Safety Lamp* from Dr. Ure's Chemical Dictionary, and to make an application to the eminent lecturer and chemist Mr. Murray, (whose obliging answer to my enquiries is given above) with a view of being instrumental in giving every possible publicity to an invention, calculated to lessen one of the dangers to which the industrious miner is so frequently exposed. I also hope our article on the mines and minerals, the documents we have selected, and the list of lessees of mines under the crown, from an early date, (though not so perfect as we could wish) furnished by my friend Mr. Thomas Norris Ince of Wirksworth, (to whom we are much indebted for other valuable communications,) may not be uninteresting to many of my friends connected with the lead mines. Before I conclude this division of the work, it is but due from me to declare, to the credit of that numerous body of men, employed in the mines in the wapentake of Wirksworth, and the High Peak in this county, that, I am convinced, not a more honest, civil, moral, and laborious class of men, ever existed in a community. At the celebration of the general peace in 1815, at Wirksworth, nothing afforded me a greater grati-

fication on that day of rejoicing amongst the cavalcade, than the sight of a company of these hardy veterans, who had stood many a blast* during the war, and had been instrumental in furnishing their king with deadly weapons,† equipped in their mining dress, and carrying the emblems of their calling, viz. their venerable men the books of law, containing their ancient rights and customs, preceded by flags and a band of music, and the more athletic their mining tools, such as picks, buckers, nogers, skewers, &c. slung about them, which had a very formidable and novel appearance.

That the mines which has through so many centuries furnished employment to the labourer, and riches to the proprietor, may still continue to flourish to the end of time, is the sincere wish of the Publisher.

(No. 10.)

Copy of the Roll of Battell Abbeie, and a List of the Noble Captains who assisted William the Conqueror to subdue this Isle.

It may probably afford some amusement to give a list of the names of the noble captains and gentlemen who came over with, and assisted king William in the conquest of this land. They are to be found in the Chronicles of Normandy. Holinshed has preserved a copy of the Catalogue and Roll, from which the following list is extracted:

"*A Catalog of such noble men, lords, and gentlemen of name, as came into the land with William the Conqueror.*

Odo, bishop of Bayeulx
Robert, erle of Mortaing
Roger, erle of Baumont, surnamed A la barbe
Guillaume Mallet, seigneur de Montfort
Henrie, sieg. de Ferrers
Guillaume d'Aubellmare, seig. de Fougieres
Guillaume de Roumare, seig. de Lithare
Le seig. de Tonque
Le seig. de la Mare
Neel le Viconte
Guillaume de Vepont
Le seig. de Magneuille
Le seig. de Grosmenil
Le seig. de S. Martin
Le seig. de Puis
Guillaume Crespin
Guillaume de Moyenne
Guillaume Desmoullins
Guillaume Desgarennes
Hugh de Gourney, alias Geneuay
Le seig. de Bray
Le seig. de Gouy
Le seig. de Laigle
Le seig. de Touarts
Le seig. de Aurenchin
Le seig. de Vitrey
Le seig. de Trassy, alias Tracy
Le seig. de Picquigny
Le seig. de Espinay
Osmond, seig. du Pont
Le seig. de Estouteuile
Le seig. de Torchy
Le seig. de Barnabost
Le seig. de Breual
Le seig. de Secielme
Le seig. de Houme
Le seig. de Souchoy
Le seig. de Cally
Le seig. de la Rivere
Euldes de Beanieu
Le seig. de Roumilly
Le seig. de Glotz
Le seig. du Sap
Le seig. de Vanuille
Le seig. Branchou
Le seig. Balleul
Le seig. de Beausault
Le seig. de Telleres
Le seig. de Senlys
Le seig. de Bacqueuille
Le seig. de Preaulx
Le seig. de Jouy
Le seig. de Longueuille
Le seig. de Aquigny
Le seig. de Passy
Le seig. de Tournay
Le seig. de Colombieres
Le seig. de Bolleber
Le seig. de Longueile
Le seig. de Garensieres
Le seig. de Houdetot
Le seig. de Malletot
Le seig. de la Haie Malerbe
Le seig. de Porch Pinche
Le seig. de Juetot
The Erle of Tanqueruile
The Erle d'Eu
The Erle d'Arques
The Erle of Aniou
The Erle of Neuers
Le seig. de Rouuile
Le Prince de Alemaigne
Le seig. de Pauilly
Le seig. de S. Cler
Le seig. de Espinay
Le seig. de Bremetot
Alain Fergant, Erle of Bretaigne
Le seig. de la Ferte
Robert, fils Heruays, Duc de Orleans
Le seig. de la Lande
Le seig. de Mortimer
Le seig. de Clare
Le seig. de Magny
Le seig. de Fontnay
Roger de Montgomery
Amaury de Touars
Le seig. de Hacqueuille
Le seig. de Neanshou
Le seig. de Perou
Robert de Beaufou
Le seig. Meauuon
Le seig. de Soteuille
Eustace de Hambleuile
Geoffry Bournom
Le seig. de Blainuile
Geoffry de Moienne
Auffray and Mauger de Carteny
Le seig. de Freanuile
Le seig. de Moubray
Le seig. de Jafitay
Guillaume Patais, seig. de la Lande
Eulde de Mortimer
Hue, Erle of Gournay
Egremont de Laigle
Richard de Aurinchin
Le seig. de Bearts
Le seig. de Souilligny
Bouteclierd Aubigny
Le seig. de Marcey
Le seig. de Lachy
Le seig. de Valdere
Eulde de Montfort
Henoyn de Cahieu
Le sieg. de Vimers
Guillaume de Mouion
Raoul Tesson de Tignolles
Anguerand, Erle of Hercourt
Roger Marmion
Raoul de Gaiel
Auenel de Viers
Pauuel du Montier Hubert
Robert Bertraule Tort
Le seig. de Seulle

* The miners are daily exposed to danger in blasting the rocks with gunpowder.
† Leaden bullets.

Le seig. Doriual
Le seig. de la Hay
Le seig. de S. John
Le seig. de Saussy
Le seig. de Brye
Richard Dollebec
Le seig. du Monfiquet
Le seig. de Bresey
Le seig. de Semilly
Le seig. de Tilly
Le seig. de Preaux
Le seig. de S. Denis
Le seig de Meuley
Le seig. de Monceaux
The Archers of Bretuile
The Archers of Vaudreuile
Le seig. de S. Sain
Le seig. de Breansou
Le seig. de Sassy
Le seig. de Nassy
Le vidam de Chartres
Le seig. de Icanuile
Le vidam du Passais
Pierre du Bailleul, seig. de Fescampe
Le Seneschal de Torchy
Le seig. de Grissey
Le seig. de Bassey
Le seig. de Tourneur
Guillaume de Colombieres
Le seig. de Bonnebault
Le seig. de Ennebault
Le seig. de Danuillers
Le seig. de Beruile
Le seig. de Creueceur
Le seig. de Breate
Le seig. de Courtray
The Erle of Eureux
Le seig. de Seint Valery
Thomas, Erle d'Aumale
The Erle de Hiesmes;

"With other lords and men of account in great numbers, whose names the author of the Chronicles of Normandie could not come by (as he himself confesseth;) in consideration whereof, and bicause diuers of these are set forth onlie by their titles of estate, and not by their surnames, we have thought it conuenient to make you partakers of the roll which some time belonged to Battell Abbeie, containing also (as the title thereof importeth) the names of such nobles and gentlemen of marque as came at this time with the Conqueror, whereof diuerse maie be the same persons which in the catalog aboue written are conteined, bearing the names of the places whereof they were possessours and owners, as by the same catalog maie appeare.

"*The Roll of Battell Abbeie.*

Avmarle
Aincourt
Audeley
Adgillam
Argentoune
Arundell
Auenant
Abell
Auuerne
Aunwers
Augers
Angenoun
Archere
Anuay
Asperuile
Albeuile
Andeuile
Amouerduile
Arcy and Akeny
Albeny
Aybeuare
Amay
Aspermound
Amerenges

Bertram
Buttecourt
Brebus and Byseg
Bardolfe
Basset and Bigot
Bohun
Bailif
Bondeuile
Brabason
Baskeruile
Bures
Bounilaine
Bois
Botelere
Boucher
Brabaion
Berners
Braibuf
Brande and Bronce
Burgh
Bushy
Banet
Blondell
Breton
Bluat and Baious
Browne
Beke
Bickard
Banistre

Baloun
Beauchampe
Bray and Bandy
Bracy
Boundes
Bascoun
Broilem
Broleuy
Burnell
Bellet
Baudewin
Beaumont
Burdon
Berteuilay
Barre
Busseuile
Blunt
Beaupere
Beuill
Barduedor
Brette
Barrett
Bonret
Bainard
Barniuale
Bonett
Barry
Bryan
Bodin
Beteruile
Bertin
Bereneuile
Bellewe
Beuery
Busshell
Boranuile
Browe
Beleuers
Buffard
Botelere
Bonueier
Boteuile
Bellire
Bastard
Bainard
Brasard
Beelhelme
Braine
Brent
Braunche
Belesuz
Blundell
Burdet
Bagot

Beauuise
Belemis
Beisin
Bernon
Boels
Belefroun
Brutz
Barchampe

Camois
Camuile
Chawent
Chauney
Conderay
Colvile
Chamberlaine
Chamburnoun
Comin
Columber
Cribett
Creuquere
Corbine
Corbett
Chaundos
Chaworth
Cleremaus
Clarell
Chopis
Chaunduit
Chantelow
Chamberay
Cressy
Curtenay
Conestable
Cholmeley
Champney
Chawnos
Comiuile
Champaine
Careuile
Carbonelle
Charles
Chereberge
Chawnes
Chaumont
Caperoun
Chcine
Curson
Couille
Chaitres
Cheines
Cateray
Cherecourt
Cammile

Clerenay
Curly
Cuily
Clinels
Chaundos
Courteney
Clifford

Denauille
Dercy
Dine
Dispensere
Daubeny
Daniell
Denise and Druell
Deuans
Deuers
Dodingsels
Darell
Delaber
Delapole
Delalinde
Delahill
Delaware
Delauache
Dakeny
Dauntre
Desny
Dabernoune
Damry
Daueros
Dauonge
Duilby
Delauere
Delahoid
Durange
Delee
Delaund
Delaward
Delaplanch
Damnot
Danway
Dehense
Deuile
Disard
Doruille
Durant
Drury
Dabitot
Dunsteruile
Dunchampe
Dambleton

Estrange

Estuteuile
Engaine
Estriels
Esturney

Ferrerers
Foluille
Fitz-Water
Fitz-Marmaduke
Fleuez
Filberd
Fitz-Roger
Fauecourt
Ferrers
Fitz-Philip
Filiot
Furniueus
Furniuaus
Fitz-Otes
Fitz-William
Fitz-Roand
Fitz-Pain
Fitz-Auger
Fitz-Aleyn
Fitz-Rauff
Fitz-Browne
Fouke
Freuil
Front de Boef
Facunberge
Fort
Frisell
Fitz-Simon
Fitz-Fouk
Filioll
Fitz-Thomas
Fitz-Morice
Fitz-Hugh
Fitz-Henrie
Fitz-Waren
Fitz-Rainold
Flamuile
Formay
Fitz-Eustach
Fitz-Laurence
Formibaud
Frisound
Finere and Fitz-Robert
Furniuale
Fitz-Geffrey
Fitz-Herbert
Fitz-Peres
Fichet

Fitz-Rewes
Fitz-Fitz
Fitz-John
Fleschampe

Gurnay
Gressy
Graunson
Gracy
Georges
Gower
Gaugy
Goband
Gray
Gaunson
Golofre
Gobion
Grensy
Graunt
Greile
Greuet
Gurry
Gurley
Grammori
Gernoun
Grendon
Gurdon
Gines
Griuil
Greneuile
Glateuile
Gurney
Giffard
Gouerges
Gamages

Haunteney
Haunsard
Hastings
Hanlay
Haurell
Husee
Herioun
Herne
Harecourt
Henoure
Houell
Hamelin
Harewell
Hardell
Haket
Hamound
Harcord
Hercy

Jarden
Jay
Jeniels
Jerconuise
Januile
Jasperuile

Kaunt
Karre
Karrowe
Koine
Kimaronne
Kiriell
Kancey
Kenelre

Loueny
Lacy
Linneby
Latomer
Loueday
Louell
Lemare
Lauetot
Lucy

Luny
Logeuile
Longespes
Louerace
Longechampe
Lascales
Lacy
Louan
Leded
Luse
Loterell
Loruge
Longeuale
Loy
Lorancourt
Loions
Limers
Longepay
Laumale
Lane
Louetot

Mohant
Mowne
Maundeuile
Marmilon
Moribray
Moruile
Miriell
Manlay
Malebraunch
Malemaine
Mortimere
Mortimaine
Muse
Marteine
Mountbother
Mountsoler
Maleule
Malet
Mounteney
Monfichet
Maleherbe
Mare
Musegros
Musard
Moine
Montrauers
Merke
Murres
Mortiuale
Monchenesy
Mallory
Marny
Mountagu
Mountford
Maule
Monhermon
Musett
Meneuile
Manteuenante and Manfe
Menpincoy
Maine
Mainard
Morell
Mainell
Maleluse
Memorous
Morreis
Morleian Maine
Malevere
Mandut
Mountmarten
Mantelet
Miners
Mauclerke
Maunchenell
Mouet
Meintenore

Meletak
Manuile
Mangisere
Maumasin
Mountlouel
Mawreward
Monhaut
Meller
Mountgomerie
Manlay
Maulard
Mainard
Menere
Martinast
Mare
Mainwairing
Matelay
Malemis
Maleheire
Moren
Melun
Marceaus
Maiell
Morton

Noers
Neuile
Newmarch
Norbet
Norice
Newborough
Neiremet
Neile
Normauile
Neofmarch
Nermitz
Nembrutz

Oteuell
Olibef
Olifant
Osenel
Oisell
Olifard
Orinall
Orioll

Pigot
Pery
Perepount
Pershale
Power
Painell
Perche and Pauey
Peurell
Perot
Picard
Pinkenie
Pomeray
Pounce
Poueley
Paifrere
Plukenet
Phuars
Punchardoun
Pinchard
Placy
Pugoy
Patefine
Place
Pampilioun
Percelay
Perere and Pekeny
Poterell
Peukedy
Peccell
Pinell
Putrill
Petiuoll

Preaus
Pantolf
Peito
Penecord
Preudirlegast
Perciuale

Qvinci
Quintiny

Ros
Ridell
Riuers
Riuell
Rous
Rushell
Raband
Ronde
Rie
Rokell
Risers
Randuile
Roselin
Rastoke
Rinuill
Rougere
Rait
Ripere
Rigny
Richmond
Rochford
Raimond

Souch
Sheuile
Seucheus
Senclere
Sent Quintin
Sent Omere
Sent Amond
Lent Legere
Someruile
Siward
Saimsouere
Sanford
Sanctes
Sauay
Saulcy
Sules
Sorell
Somerey
Sent John
Sent George
Sent Les
Sesse
Saluin
Say
Solers
Saulay
Sent Albin
Sent Martin
Sourdemale
Seguin
Sent Barbe
Sent Vile
Souremount
Soreglise
Sanduile
Sauncey
Sirewast
Sent Cheueroll
Sent More
Sent Scudemore

Toget
Tercy
Tuchet
Tracy
Trousbut

Trainell
Taket
Trussel and Trison
Talbot
Touny
Traies
Tollemach
Tolous
Tanny
Touke
Tibtote
Turbeuile
Turuile
Tomy and Tauerner
Trenchduile
Trenchelion
Tankeruille
Tirell
Triuet
Tolet
Trauers
Tardeuile
Turburuile
Tineuile
Torell
Tortechappel
Trusbote
Treuerell
Tenwis
Totelles

Vere
Vernoun
Vesey
Verdoune
Valence
Verdeire
Vauasour
Vendore
Verlay
Valenger
Venables
Venoure
Vilan
Verland
Valers
Veirny
Vauvruile
Veniels
Verrere
Vschere
Veffay
Vanay
Vian
Vernoys
Vrnall
Vnket
Vrnaful
Vasderoll
Vaberon
Valingford
Venicorde
Valiue
Viuille
Vancorde and Valenges

Wardebois
Ward
Wafre
Wake
Wareine
Wate
Watelin
Wateuil
Wely
Werdonell
Wespaile
Wiuell."

(No. 11.)

Domesday-Book.

It may not be unacceptable to the reader to lay before him the following interesting particulars relative to this very valuable work.

The drift, or design of the book, is to serve as a register, by which sentence may be given in the tenures of estates; and from which that noted question, whether lands be ancient demesne, or not, is still decided. Its contents are summed up in the following verses:

> "Quid deberetur fisco, quæ, quanta tributa,
> Nomine quis census, quæ vectigalia, quantum
> Quisque teneretur feodali solvere jure,
> Qui sunt exempti, vel quos angaria damnat,
> Qui sunt vel glebæ servi, vel conditionis,
> Quive manumissus patrono jure ligatur."

Domesday-book, according to Sir H. Spelman, if not the most ancient, is yet the most venerable monument of Great Britain, and contains an account of all the lands of England, except the four northern counties, Northumberland, Cumberland, Westmoreland, Durham, and part of Lancashire; and describes the quantity and particular nature of them, whether meadow, pasture, arable, wood, or waste land. It mentions the rent and taxation, and records the several possessors of land, their number and distinct degrees. King Alfred, about the year 900, composed a book of the like nature, of which this was, in some measure, a copy. The exact time of William I. undertaking the survey is differently stated; but it appears to have been begun in 1080, and completed in 1086. The reason given for doing it was, that every man should be satisfied with his own right, and not usurp with impunity what belonged to another. By this also, William would be acquainted with an exact knowledge of the property of the crown, by the forfeitures of the lands of the English nobility who fell at the battle of Hastings; and he was thus enabled to remunerate his Norman followers, by the grants of their immense confiscated estates. When it hath been necessary to distinguish whether lands were held in ancient demesne, or in what other manner, recourse hath always been had to Domesday-book, and to that only, to determine the doubt. If lands were set down in that book under the title of "Terra Regis," or if it was said there, "Rex habet," such land or such a town, it was determined to be the king's ancient demesne. If the land or town were therein set down under the name of a private lord or subject, then it was determined to have been, at the time of the survey, the land of such private person, and not ancient demesne. Indeed, its name is said to have been derived from its definitive authority, from which, as at the sentence pronounced at domesday, or the day of judgment, there could be no appeal. This record is comprised in two volumes, one a folio, the other a quarto; the first is written on three hundred and eighty-two double pages of vellum, in a small but plain character, each page having a double column. Some of the capital letters and principal passages are touched with red ink, and some have strokes of red ink run across them, as if scratched out, but the design was to mark such passages with more particular notice: this volume contains the description of thirty-one counties; towards the beginning of each county, there is a catalogue of the capital lords or great land-holders who possessed any thing in it, beginning with the king, and then naming the great lords according to their rank and dignity. The other volume is in quarto, written on four hundred and fifty double pages of vellum, but in a single column, and in a large but very fair character. It contains the counties of Essex, fo. 1, Norfolk, fo. 109, Suffolk, fo. 281 to the end; part of the county of Rutland is included in that of Northampton, and part of Lancashire in the counties of York and Chester. Until of late years, it has been kept under three different locks and keys;—one in the custody of the treasurer, and the others of the two chamberlains of the exchequer.—It is now deposited in the Chapter-house at Westminster, where it may be consulted, on paying to the proper officer a fee of six and eightpence for a search, and fourpence per line for a transcript. Many parts of the ancient record have been printed in different county histories, and many more are to be found in public and private libraries. A catalogue of them is given in an account of Domesday-book, written by Philip Carterett Webb, esq. and published in 1756 by the Antiquarian Society. Another has been since published by Richard Gough, esq. in his useful book, "Anecdotes of British Topography," ranged under the different counties. The whole was, in the year 1783, printed at the public expense, by order of his late majesty king George III. with types cut for that purpose, and a copy presented to each member of parliament. *Extract from Preface to Grose's Antiquities.*

We are told by Ingulphus, that king Alfred made a like register with that of William the Conqueror. It was begun upon that prince's dividing his kingdom into counties, hundreds, tithings, &c. when an inquisition being taken of the several districts, it was digested into a register, called Domboc, q. d. the Judgment-book, and was deposited in the church of Winchester, whence it is also called the "Winchester-book," and "Rotulus Winton." It was compiled for the use of the Court-baron, hundred, and county-court, the court-leet, and sheriff's tourn; tribunals, which he established for the trial of all causes civil or criminal, in the very districts wherein the complaints arose; all of them subject, however, to be inspected, controlled, and kept within the bounds of the universal, or common law, by the king's own courts, which were then itinerant, being kept in the king's palace, and removing with his household in those royal progresses which he continually made from one end to the other. This book is said to have been extant so late as the reign of king Edward IV. but is now unfortunately lost. It probably contained the principal maxims of common law, the penalties for misdemeanors, and the forms of judicial proceedings. And upon the model of this Dom-boc it is, that the Domesday of the Conqueror was formed.

That of king Alfred referred to the time of king Ethelred, and that of the Conqueror to the time of Edward the Confessor: the entries being thus made, "C. tenet rex Guilelmus in dominico, et valet ibi ducatæ, &c. T. R. E. valebat;" q. d. it is worth so much tempore regis Eduardi, in the time of king Edward.

King William conferred on his followers the estates of the nobility and gentry of this kingdom in military tenure, and extended his bounty in so large a manner, that Ingulphus, who lived in court with him, said that the king disposed of the earldoms and baronies, the bishopricks and dignities of the whole land to his Normans, and scarcely suffered any Englishman to ascend the state of honour, or the government of any lordship.

"When he had thus liberally gratified these great men for their eminent service in that signal battle at Hastings, he obliged them in an oath of fealty by this law made in the common-council of the kingdom:—

"We do ordain, that all our freemen shall swear that within and without our whole kingdom of England (which in old time was called the kingdom of Britain) they will be faithful to king William their lord, and will serve him every where, and defend his laws and honours against his enemies and strangers." (Leges, Guliel. I. cap. 52. Lamb. Sax. Laws, fol. 170.)

"These freemen were such as held in military service, and were not knighted; for those that were knighted were generally called Milites, and the other Liberi Homines, though sometimes they were taken promiscuously one for another; and to endear the hearts of those military men, he sweetened them with another law, which was made in the common-council of the kingdom:—

"We also will, and firmly command and grant, that all freemen of the whole monarchy of our kingdom, may have and hold their lands and possessions well and in peace, free from all unjust exactions and tallages; so that nothing shall be exacted or taken from them, unless their free service, which they ought of right to do, and are bound to perform to us, as it was ordained for them, and given and granted to them by us as a perpetual right of inheritance, by the common-council of our said whole kingdom." (Ibid. I. cap. 55. Lamb. ibid.)

"These were the English lands which king William had given in fee to his soldiers, to hold them under such services, as he had appointed by right of succession or inheritance; which right was not very common in those days among military tenants; for generally they did hold their lands at the will of the lord; and if they failed in the performance of their duty and service to the lord, they forfeited their estates, which is evident by another law made in the common-council:—

"We ordain and firmly command, that all earls, barons, knights, esquires, and all the freemen of our whole kingdom, shall always be fitted with horse and arms, as it becomes and behoves them to be; and shall be always ready and provided to perform their whole service to us when it shall be always needful, according to what they ought to do to us of right for their fees and tenements, and as we ordained they should do by the common-council of our said whole kingdom, and granted to them in fee by hereditary right; and this command shall not be violated by any way upon full forfeiture [that is to say, of all their lands and goods.]" Leges, Guliel. I. cap. 58. Lamb. fol. 171.

"By this law it is clear, that all the freemen in this kingdom were bound by their tenure, to perform their military services with horse and arms, according to the value of their fees; therefore they were called Tenants in Military Service; for these were the lawful men that named and chose juries, and served upon juries, as doth plainly appear by this law:—

"We do also ordain and firmly command, that all the freemen of our kingdom shall be sworn brothers stoutly to preserve and defend our monarchy and our kingdom, with all their strength and might to the uttermost of their power, and keep entirely the peace and dignity of our crown, and continually give right judgment, to do justice by all ways and means to their power, without fraud or delay." (Ibid. I. cap. 59. Lamb. ibid.)

"All freemen were obliged by their tenure and this law,

"First, To preserve and defend the monarchy (which was the government) and the kingdom, with all their strength and might to the uttermost of their power, and to keep entirely

the peace and dignity of the crown; which service consisted in the performance of two things:—

1. To serve the King with horse and arms at home, or upon any expedition abroad, when it was needful. 2. To advise the King in his great council, when he should require that service of them; and in order to it the inferior tenants, who paid escuage, were bound to contribute to the charge in proportion to the value of their fees.

"Secondly, To judge rightly, and to do justice by all ways and means to their power, without fraud or delay, not only in their own courts or jurisdictions, where they were lords; but also in the county and hundred court, where they were suitors, and in the courts where they were jurors and recognitors of assize; and the chief of them were sheriffs, hundredaries, and other judges and ministerial officers in their several counties." *Chauncey's Hertfordshire.*

Words used in Domesday.

(In burgo) means a large town or city, to which particular power and privileges had been granted by the great men or governors to whom they belonged. It is not possible at this day to know what particular privileges each of these places enjoyed, but it is probable they were not all alike; as some at this day send members to parliament and others do not. Gilds were erected for the better government of them, consisting of a master, like the Saxon alderman, and a fraternity of the principal inhabitants, who were to assist him on all proper occasions; these persons were composed both of the clergy and laity. These have chiefly been changed into corporations since the reign of Henry VIII. established by charters granted by the king, which particularly express, all the power derived to them is from the crown. All the inhabitants of these places, who were not obliged to assist the king in his wars, and attend on him in person, whether tradesmen or others, were called *castellanis* and *burgenses*, if entitled to the privileges and immunities of the place; and their houses, *burgage houses* or *burgage tenements.*

(Ep's de Cestre.) From the first conversion of the Mercians to christianity they had a bishop, who, taking the name of his diocess, was called Bishop of Mercia. He had power to live at any place in his diocess, large or small, where he had an estate.*

(Rogerus Comes.) This was Roger de Monte Gomerico, or Montgomery, who was descended from Gunnora, Duchess of Normandy, great grandmother to the Conqueror, who created him Earl of Shrewsbury, for his great services in the battles of Hastings and York. This nobleman, with Hugh Lupus, Earl of Chester, and William Fitz Osborne, Earl of Hereford, all of whom were near relations to King William, were by him entrusted with the care and government of the western parts of the island, in order to secure them against the incursions and depredations of the Welsh, who frequently plundered these people, and were likely to be very troublesome, as were afterwards found to be the case by many of their descendants.

(Robertus de Stadford.) This nobleman was nearly related to the Conqueror, came over to England with him, and for his faithfulness and good conduct at the battle of Hastings and other places, was rewarded with one hundred and thirty-one lordships, an immense estate, and a prodigious extent of power.

(Lib denar) i. e. nine pounds in money; for Sir W. Spelman observes, that all the people, by the word denarii, in the plural number, mean money in general.

(Rex tenet) to hold or occupy lands or tenements. Under the feudal law, first brought into this island by the Norman king, he that enjoyed or had a right to any lands or tenements, must hold them of the king immediately, or of the lord of the fee, to whom the king had granted them, under some rent, service, duty or acknowledgment. This, however, cannot possibly be the meaning of the word *tenet* in the Domesday book, when applied to the king, because he cannot be said to hold lands of himself. By it, then, we must understand, that these lands and tenements belonged to his cousin Edward, or to the crown, and so came to him as lands of inheritance along with it; for though this king in a short time became the most absolute monarch that ever sat on the British throne, yet he sometimes made a show of acting according to the Saxon laws, and pretended to come to the crown by the will of his cousin Edward; but at others he acted tyrannically, and showed no favours to the Saxons. If a Norman had a mind of an estate in the neighbourhood where he resided, it was not a difficult matter for him to make a claim, and bring the affair to a trial, when the jurymen being all Normans, no verdict could ever be obtained by the defendant. That

* One Lanfranc, an Italian or Lombard, came into England with the Conqueror, and was by him made archbishop of Canterbury. He was a proud man, a great lover of power, pomp and grandeur; and in a synod which he summoned to meet at London, in 1078, he procured an order that all the bishops should reside in one of the largest towns or cities in their respective dioceses. One Peter, a Norman, having been made bishop of Mercia by the Conqueror, removed from Lichfield to Leicester, in conformity to this decree: and from this time was called bishop of Chester; and notwithstanding Lichfield had been thought sufficiently large for Adulph the archbishop, it was now deemed too small for a Norman bishop: who from this time was to exercise a temporal as well as a spiritual power, and by his dress and equipage was to be distinguished from the rest of the priesthood.

this must be the meaning of the word *tenet*, is farther evident from the grant which this king made to his nephew, Hugh de Abrinces, of the Earldom of Chester, which he was to hold as freely by the sword as the king himself held England by the crown. Sir P. Leycester says, some imagine this grant was nothing more than making him and his descendants sword-bearers at the coronation of our kings; because Hugh, Earl of Chester, at the marriage of Henry III. 1236, claimed this office as belonging to his ancestors, which claim was allowed. Sir Peter, however, is of an opinion, that something more magnificent must be couched in these words; for, as regality is inherent in the crown, a right of dignity was by this grant conveyed to the Earls of Chester by the sword, whose power in their jurisdiction was little inferior to that of the king in other places. The lands that then belonged to king Edward, or to the crown of England, are now called ancient demesne; and the others that were forfeited by the Saxons, who appeared in arms against William, and were not distributed by him to his principal officers, are called demesne lands to this day; and both together, crown lands. Since the time of the survey, our kings have given freely, or have by necessity been forced to part with all these crown lands, except some forests. After the restoration of Charles II. the civil list was set on foot, and established in lieu of them, for the maintenance of the king and royal family; so that, as our ancient kings had an estate in land, our reigning monarch might have one equivalent in money.

(Cum Præposito.) A reeve, bailiff or steward; his business was to take care of the king's tenants, to collect their rents, and to transmit it to court; and to manage the lands reserved for his own use.

(Unus liber homo.) One freeman. This class of men were not free, in the same sense of the word, as we are in these happy times; when every man may sit down under his own vine and his own fig-tree; can remove from one place to another, as he pleases, without the leave of his lord; and can eat, drink and be clothed, according to his inclination and resources. Freedoms, in the days of the Norman Conqueror, were no more than an exemption from bodily labour and servile offices, which all the inferior were obliged to do for the lord of the manor; for the miles or soldier was called free, although he was bound to obey the orders of his officers.

(Cum sex carucis.) The word charruc, in France and Normandy, in Latin caruca, signified a plough, which some say was peculiar to that country; but others that it came from the celtic or old British word carr, still in use here and in Ireland, for a carriage with two wheels; from whence the words charl, churl, carl or karl, for a clown, ploughman, or countryman are derived.

(Terra est sex carucatæ.) Carucata is a carue or plough land, that is, as much as one man could manage and till with a team of oxen in a year. This could be no certain quantity: for an industrious man would plough a great deal more in the compass of a year than an idle one; and a team of horses will do much more than a team of oxen, as they move quicker. Mr. Jacob, in his Law Dictionary, states, that in the time of Edward II. it contained about one hundred acres, and was the same as a *hide* or *soca*, which Littleton says, were synonymous; but by the statutes 7 and 8 William III. a plough land was not estimated by measure, but by value, and fixed at £50. a year. Though the quantity of land in a carucate was thus uncertain, the whole kingdom was at that early period measured by it; and in after times so taxed, and then called *caruagium*, or *carucagium* in Latin.

(Hidæ.) Sometimes *hida* and *carucata* were synonymous terms, but they are not so in this book: for the word hida is always placed before carucata, so that we may suppose it contained a greater quantity of land. There are so many different accounts of the quantity of acres in a hide, that it would be difficult to say what was the real measure of it. Some authors say it contained 94, others 96, others fix it at 100 acres, and some make it seven or eight times that number. When the nation was taxed by hides, the tax was called *hidage*, in Latin *hidagium*. About the time of the survey, in 1084, the Conqueror laid six shillings on every hide of land; William Rufus four; and Henry I. three shillings.

Derbyshire contains about 972 square miles, each of which consists of 640 acres; if, then, we allow each hide to be composed of 100 acres, or six hides to be contained in one mile, there must have been 5832 such hides, at least, in the whole county; or suppose 640 acres made such a hide, there must have been 972 in this county.

(Terra regis.) The property or estate of the king. Lord Coke observes, that terra signifies all manner of land, meadows, pastures, &c.; it also includes houses and all other buildings erected upon it; and such an estate the Conqueror reserved to himself, in this and every other county of England, making in the whole 1422 manors or lordships, besides farms, lands and rent, in white money—according to *Dr. Brady.*

(Unus servus.) A bailiff or steward to direct the tenants, farmers and labourers, and is always named before the villani and bordarii.

(Villani.) Farmers, such as had goods and stock of their own, and paid rent to their lords: part in money, at this time very scarce and dear, and part in labour: being obliged to till and plough the land, sow and carry the corn and hay, &c. for the use of the lord and his family. They took their name from Villa, a hamlet, small town or village, where they generally dwelt; and in process of time, lord Coke says, they became copyholders. But the tenure by which they held their lands was called villenage or villenagium.

(Bordarii.) Of the three sorts of inferior people here mentioned, these were the meanest; and little, if any, better than the present negroes. They received their name from an old word, bord, which signified a poor-house, a cottage, and also the edge, boundary or limit of any thing. At present the day-labourers approach nearest to this class.

These various classes did not enjoy the same privileges in those days, as the same classes in society do in ours. Some of the lords had power over the lives of their vassals; could punish their offences with the utmost severity; and when of a tyrannical disposition, could deprive them not only of the poor pittances they had acquired under them, but of their lives. This arbitrary power, to the honour of England, has long since been taken away on the south side of the river Tweed; and, since the rebellion in 1745, has by Act of Parliament, been taken away from the highland lords, in the north part of Great Britain.

(Sex Carucæ.) Six ploughs. The ancient Britons had their cars or chariots, whence the French charruc, the Roman carrus, the word caruca, for a plough or team, and our carl and churl, for a country clown or a ploughman, may all be derived. It took nineteen men to manage six ploughs, in the Conqueror's days.

(Dimidium leuvælongæ.) Half a mile long. This word is written four ways, leuva, leuca, leuga and lega. The Normans brought it hither; and Ingulphus, one of their historians, says, that in his country it was used for two miles; but here, in England, and in Domesday-book, it always signifies one mile; although the taxors, when they made this book, did not take notice of any odd measure, when it exceeded a mile; and that the king and court were content, and allowed it to be so.

(Et tres quarentenas lata.) Three furlongs broad. Twelve of these, Sir Henry Spelman tells us, made one leuca or mile; that each of them contained forty perches, and each perch sixteen feet.

(Canonici.) In the fourth century, some men of gloomy thoughts and melancholy tempers, began in Egypt to separate themselves from the rest of the world, to live in caves and deserts, and principally to avoid the conversations of women, as a thing most abominable and sinful, though the first precept in the Old Testament, is to be fruitful and multiply. The Pope of Rome soon became sensible that he might derive great advantage in giving encouragement to this whimsical humour of the people. Whenever, or wherever a man or woman (for the latter soon caught the infection) was found to exceed the rest of their neighbours in austerity, moroseness and bodily punishment, denying themselves the use of almost every thing which God had given them freely to enjoy, the Pope canonized and made saints of them. By these means, the whole world was overrun with these enthusiasts in a few centuries, who went under the general name of monks* and nuns.† Many ages did not elapse before a reformation was required among these bodies of christians, as they committed many irregularities and enormities. In England there were three of these most remarkable personages, according to Sir William Dugdale, at the time when Domesday-book was written, viz.: St. Cuthbert, St. Dunstan, and Alp Lanfranc, who had great power in the church. Some of these saints either wrote rules and orders for their followers to walk by, or such at least, after their deaths, were published in their names, among which none here were so famous as St. Bennet and St. Austin. Those who undertook to live in monasteries and colleges, by these rules, were called canonici, from a Greek word, signifying rule, order, law, &c. and were either secular or religious. The former, called in Domesday-book presbyteri, priests, took the care of souls upon them, preached and visited the sick; and the latter lived within their own walls, and might properly be said to consume the fruits of the earth only. Every convent had this rule or canon, belonging to their order, fairly transcribed, and frequently read publicly before the whole house. They had also three other books, called, a Missale, a Martyrology, and an Obituarium or Necrologium. The first contained all their public prayers and offices of devotion; the second a register of all the christian saints and martyrs, with the place and time of their passion; and in the third, the deaths of their founders and benefactors were entered, that they might observe the days of commemoration for them. Their income arose from lands, given them by the great men, for the good of whose souls they were obliged to pray, more or less, according to the value of the donation.

(Sacham or Socham.) These two words are frequently joined together in old writings, and seem to be the same meaning: differing only in the degree of power; for by them is meant the holding courts in manors, to try petty causes among the lord's tenants, and to make a final end of them by fines and amercements, to be paid to the lord. Saca or sacha, in the Saxon tongue, signifies the same as causa, in Latin; and so we at this day must be understood, when we say, for God's sake, for my sake, &c.; soka, soca or socha, in the same language, means a plough sometimes, and at others an immunity; and the power, liberty and privileges belonging to a barony or manor, of holding a court, and punishing small offences among tenants; and lastly, rent.

(Geldum.) The Saxon words, geld or gild, mean a tax or payment of money to the king; and in this book, what our historians call danegeld or danegelt, or that payment which was first laid on the nation by the Danes. By the advice of archbishop Siric, in 991, king Ethel-

* So called, because they lived alone in caves, &c. or in a state of celibacy.
† These were under an oath and vow to admit no man among them.

red agreed to pay them £10,000. to be quiet, and not plunder his subjects, as appears by the Saxon Annals; and the same book likewise tells us, that in 38 years the Danes received £171,957. from the people of this nation; a prodigious and almost incredible sum in those days. Some authors say, this money was raised at first by one shilling from every hide of land, and afterwards double that sum. King Edward took off this land-tax, but the Conqueror laid it on again, and so did his successor, but not perhaps in a manner so oppressive: because some lands seem not to be charged with it, and the earl had a third part given him by the king. It appears from Ralph de Diceto, that fifteen counties, whereof Derbyshire was one, were charged with this tax.

(De feudo suo.) The word fædum or feudum was brought into this island by the Normans, the Saxons having no such word among them for an estate of inheritance. Mr. Sumner and others, however, derive it from their language, in which feoh or fee, signifies a gratuity, reward or wages, for work done; and thus we talk of doctor's fees, lawyer's fees, court fees, &c. The pay of the old Roman soldiers, was first, the lands of those they had conquered: and, afterwards, money. This they called Stipendia and beneficia; and in like manner, as has been observed before, William the Norman divided the lands of those Saxons who had been in arms against him, among his soldiers; but not to every man a share, as they did, but among his officers and generals, and called them fæda or feuda, or fees. These being settled by a writing on them and their heirs for ever, they were said to hold them of the king in capite, for he reserved some small payments and privileges to himself and his successors. These great men had liberty to grant part of these lands to others, under such limitations and reserves as they thought proper; and by this means it has so happened, that there are no allodia, or lands that are absolutely free from some kind of payment or acknowledgment of a superior, in any part of England, except such as belong to the crown. Those lands, however, that belong to a man and his heirs, are called frechold lands, and a fee simple.

(In suo domino.) Dominium or dominicum, is now called domain, demain or demesne, from dominus, lord. By it our lawyers understand such lands as the lord of the manor kept in his own hands, and occupied by his own servants for the use of his family. All other lands, as opposed to these, were called terræ assisæ: i. e. rented, farmed, let for such an assize or rent, of money or provisions, or both.

(Vastas mansiones.) Here we see two sorts of houses, the *burgenses* and *mansiones*; so that as the former were inhabited by the privileged people, the latter must belong to such as had no right to the laws and advantages of the incorporated body; and those are said to be vastæ, which were empty at the time of the survey. It is certain that the earls, Edwin and Algar, caused Mercia to take up arms against the Conqueror, and that he laid waste many houses and lands on this occasion, in this and other counties.

(De honore comitum or *comitatus.)* Sir H. Spelman thinks, the word honor was never used for an estate, feudal, patrimony or barony, by the Saxons, but that the Normans first introduced it in this sense; that it is seldom to be met with from the time of Richard II. to that of Henry VIII. who about the year 1540, revived the use of it; for about that time, Hampton court, and six other places, acquired the title of *honors*; in so many years, for by Stat. 37, ch. 18, of that king, he was empowered to erect by letters patent four *honors*, and as many more as he pleased. By this word is now meant a large seignory or estate, consisting of several lordships, manors, knight's fees, with all their customs and privileges. Such estates were anciently called beneficia, and little differed from baronies, being held of the king in capite.

Division of Property at the Time of the Domesday Survey.

At the time this book was compiled, the King held twenty-one manors in this county in demesne, and one was held under the crown; the Bishop of Chester had two; the Abbot and Convent of Burton had six; Roger de Poictou four, and one was held under him; Henry de Ferrars, ancestor of the Earls of Derby of that name, held forty-nine manors in demesne, and forty-one were held under him; William Peverel held six in demesne, and six others were held under him; Walter Deincourt held six in demesne; Geoffry Alselin had four in demesne, and two were held under him; Ralph Fitzhubert held eleven in demesne, and eight were held under him; Ralph de Burun, ancestor of the celebrated Poet, Lord Byron, had four in demesne, and one was held under him—this family resided at Horestan (now Horsley) Castle; Ascoit Musard held five in demesne; two manors were held under Gilbert de Gand, the Conqueror's nephew; Nigel de Statford held nine in demesne; Robert Fitzwilliam, one; Roger de Busli had four in demesne, and four were held under him; and the King's Thanes held twenty-two manors immediately of the crown.

The following Table will show more particularly who were proprietors of the several manors and lands both at the time of the Survey and in that of Edward the Confessor.

Modern Names.	*Ancient Name of Manors and Lands.*	*Possessors in the reign of Edward the Confessor.*	*Possessors when the Survey of Domesday was taken.*
Abney, in Hope	Habenai	Swain	William Peverel
Alderwasley	– – – –	– – – –	Henry de Ferrars
Alfreton	Elstretune	Morcar	Ingram, under Roger de Busli
Allestree	Adelardestreu, a berwick of Markeaton	Earl Siward	Hugh Earl of Chester
Alkmanton	Alchementune	Uluiet	Ralph, under Henry de Ferrars
Alvaston	Alewoldestune	Tochi	Geoffry Alselin
Alsop in the Dale	Elleshope, a berwick of Ashbourn	– – – –	The King
Ambaston	Emboldestune	Tochi	Geoffry Alselin
Appleby	Apleby	– – – –	The Abbot of Burton
Ash, in Sutton	Eisse	Ulchel, Avic, and Hacon	Robert, under Henry de Ferrars
Ashbourn	Esseburne	– – – –	The King
Ashford in the Water	Aiseford	The King	The King
Ashover	Essovre	Leuric and Levenot	Serlo, under Ralph Fitzhubert
Arleston	Erlestune	Golegri and Ravenchel	Henry de Ferrars
Aston, in Hope	Estune, a berwick of Hope	– – – –	The King
Aston on Trent	Æstune	The King	Uctebrand, under Henry de Ferrars
Aston, in Sudbury	Estune	Levenot	Alcher, under Henry de Ferrars
Atlow	Etelawe	Eluric	Henry de Ferrars
Bakewell	Badequella	The King	The King
Ballidon	Belidene	Leuric and Levenot	Ralph Fitzhubert
Bamford	Banford	– – – –	Ralph Fitzhubert
Barlborough	Barleburgh	Levenot	Robert, under Ralph Fitzhubert
Barlow, Great	Barleie	Hacon	Ascoit Musard
Barlow, Little	– – – –	Leuric and Uctred	The King's Thanes
Barrowcote, in Etwall	Berverdescote	Gamel and others	Henry de Ferrars, or the Abbot of Burton
Barrow	Barwe	Godwin and Colegri	Henry de Ferrars
———	Barewe	– – – –	The King and Ralph Fitzhubert
Barton Blount	Barctune	Godric and others	Ralph, under Henry de Ferrars
Baslow	Basselau, a berwick of Bakewell	The King	The King
Beeley	Begelie	Godric	The King
Bentley, Fenny	Benedlege, a berwick of Ashbourn	– – – –	The King
Bentley, Hungry	Beneleie	Uluiet and Ulchel	Ralph, under Henry de Ferrars
Beighton and Berley	Bectune	Steinulf and Swain	Roger de Poictou and Lewin, under Roger de Busli
Birch Hills, near Edensor	Berceles, a berwick in Bakewell	The King	The King
Birchover	Barcovere	– – – –	Henry de Ferrars
Blackwell	Blachewelle, a berwick in Bakewell	The King	The King
Bolsover	Belesovre	Leuric	Robert, under William Peverel
Bonsall	Bunteshale, a berwick of Mestesford (Matlock)	– – – –	The King
Boulton	Boletune	Levenot	Ralph Fitzhubert
Boythorp	Buitorp, a berwick of Newbold	– – – –	The King
Boylstone	Boilestun	Godric and Levenot	Henry de Ferrars
Bradley	Braidlei	Aluric and Lewin	Henry de Ferrars
Bradbourn	Bradeburne	Eluric	Henry de Ferrars
Bradwell	Bradewelle	Leving and others	William Peverel
Brailsford	Brailesford	Earl Wallef	Elsin, under Henry de Ferrars
Bramley Lane, in Ault Hucknall	Branlege	– – – –	Roger de Busli
Brampton	Brantune or Brandune	Wade, Branwin, &c.	Walter Deincourt, Ascoit Musard
Brassington	Branzinctun	Siward	Henry de Ferrars
Breadsall	Braideshale	Siward	Robert, under Henry de Ferrars
Breaston	Braidestun	Ligulf and Lewin Cilt	Roger de Busli
———	Bradestune	Levenot and Sterre	Herbert, under Henry de Ferrars
Bretby	Bretebi	Algar	The King
Brimington	Brimintune, a berwick of Newbold	– – – –	The King
Broadlow Ash	Bredelawe, a berwick of Ashbourn	– – – –	The King

Modern Names.	*Ancient Name of Manors and Lands.*	*Possessors in the reign of Edward the Confessor.*	*Possessors when the Survey of Domesday was taken.*
Bubden, in Longford	Bubedene	Ulchel	Elsin, under Hen. de Ferrars and bp. of Chester
Brough			William Peverel
Bubnell	Bubenenle, a berwick of Bakewell		The King
Burley, in Duffield	Berleie, a berw. of Darley		The King
	Bradelei, an appendage of Duffield	Siward	Henry de Ferrars
Burnaston	Burnulfestune	Gamel and others	Henry de Ferrars
Burton, near Bakewell	Burtune, a berwick of Bakewell		The King
Callow	Caldelawe, a berwick of Wirksworth		The King
Caldwell	Caldewelle	Ælfric	The Abbot of Burton
Calver	Caluoure, a berwick of Ashford		The King
Carsington	Ghersintune, a berwick of Wirksworth		The King
Castleton, in Peak Forest	Castelli Terra in Peche Fers	Gurnebern and Hundinc	William Peverel
Catton	Chetun	Siward	Nigel, under Henry de Ferrars
Chaddesden	Cedesdene		Henry de Ferrars
Chapel-en-le-Frith			The King
Charlesworth	Cheveneswrde, part of Longden dale	Suinus	The King
Chatsworth	Chetsvorde	Chetel	The King
Chellaston	Celerdestune	Ulsi	The King and Amalric, under Henry de Ferrars
Chesterfield	Cestrefeld, a berwick of Newbold		The King
Chilcote	Cildecote, a berwick of Clifton		The King
Chisworth	Chisevurde, part of Longden dale	Suinus	The King
Chunal	Ceolhal, part of Longden dale	Eilmer	The King
Church Broughton	Broctune	Uluric	Henry de Ferrars
Clifton	Cliptune	Leuric and Levenot	Ralph Fitzhubert
Clown	Clune	Ernvi	Ernvi, under the King
Coal Aston, in Dronfield	Estune	Tolf	Lewin, one of the King's Thanes
Codnor	Cotenoure		Warner, under William Peverel
Cold Eaton	Eitune, a berwick of Ashbourn		The King
Compton			The King
Coton in the Elms	Cotune, or Cotes	Algar	The Abbot of Burton
Cotton, near Derby	Codetune	Osmund	The King, under Henry de Ferrars
Cowley, in Darley Dale	Collei	Swain and Uctred Leuric and Levenot	Swain, under Henry de Ferrars Ralph Fitzhubert
Crich	Crice		The King
Cromford	Crunforde, a berwick of Wirksworth		
Cronkesden Grange, in Hartington	Cranchesberie, a berwick of Bakewell		The King
Croxall	Crocheshalle	Siward	Roger, under Henry de Ferrars
Cubley	Cobelei	Siward	Ralph, under Henry de Ferrars
Dalbury	Delbebi, Dellingeberie	Godric	Henry de Ferrars
Dalbury Lees			The Abbot of Burton
Darley Dale	Dereleie		The King
Denby	Denebi	Osmund	Ralph de Burun
Derby	Darbie		The King
Dinting	Dentinc, in Longden dale	Levenot	The King
Donisthorp	Durandestorp	Carl	Nigel de Statford
Dore	Dore	Edwin and Lewin	Roger de Busli
Doveridge	Dubrige	Earl Edwin	The Monks of Tutbury, under Henry de Ferrars
Drakelow	Drachelawe	Elric	Nigel de Statford
Draycot	Draicot		The Bishop of Chester
Dronfield	Dranefeld		The King
Duckmanton	Dochemanestun	Levenot	Ralph Fitzhubert
Duffield	Dunelle	Siward	Henry de Ferrars
Eckington	Echintune, a berwick of Newbold	Levenot	The King
Edale	Aidele, a berwick of Hope	The King	The King
Edensor	Ednesoure	Levenot and Chetel	Henry de Ferrars
Ednaston Edlaston	Ednodestune Ednodestun	Tochi	Henry de Ferrars and Geoffry Alselin

Modern Names.	*Ancient Name of Manors and Lands.*	*Possessors in the reign of Edward the Confessor.*	*Possessors when the Survey of Domesday was taken.*
Edinghale	Ednunghalle	Ælgar	The King's Thanes
Egginton	Eghintune	Tochi	Azelin, under Geoffry Alselin
Egstow, in North Winfield	Tegestou	Levenot	Robert, under Ralph Fitzhubert
Elmton	Elmetune	Swain Cilt	Walter Deincourt
Elton	Eltune	Caschin and Uctred	Henry de Ferrars
Elvaston	Ælwoldestun	Tochi	Geoffry Alselin
Etwall	Etewelle	Gamel and others	Saswalo, under Henry de Ferrars
———	———	Dunstan	Azelin, under Geoffry Alselin
Fairfield	– – –	– – –	William Peverel
Farley	Farleie	– – –	The King
Fenton, near Ashbourn	Faitune	Ulchel	Roger, under Henry de Ferrars
Ferneylee	– – –	– – –	William Peverel
Findern	Findre	– – –	The Abbot of Burton
Flagg	Flagun, a berwick of Ashford	Ulchel	The King
Foremark	Fornewerche	– – –	Nigel de Statford
Foston	Farulvestun	Levenot and others	Henry de Ferrars
Glapwell	Glapewelle	Leuric	Serlo, under William Peverel
Glossop	Glosop	Levinc	The King
Gratton	Gratune	Chetel	Henry de Ferrars
Gresley, Castle	– – –	– – –	Nigel de Statford
Gresley, Church	– – –	– – –	Nigel de Statford
Haddon, Nether and Over	Hadun, berwicks of Bakewell	– – –	The King
Hadfield	Hedfelt, in Longden dale	– – –	The King
Hallam, West, Kirk	Halun	Dunstan	Ralph de Burun
———, Little	Halen, held with Tilchestune	Ulf Finise	Gilbert de Gand
Hanley, in Winfield	Henleie	Godric	Lewin, under the King
Hanson Grange	Hanzedone, a berwick of Ashbourn	– – –	The King
Harstoft, in Hucknall	Hertestaf	Steinulf	Roger de Poictou
Hartle	Hortel	Chetel	Henry de Ferrars
———	Hortil	Levenot	Ralph Fitzhubert
Hartington	Hortedun	Godwin and Ligulf	Henry de Ferrars
Hartshorn	Heorteshorne	Aluric	Henry de Ferrars
Hassop	Heteshope, a berwick of Ashford	– – –	The King
Hathersage	Hereseige	Levenot and Leuric	Ralph Fitzhubert
Hatton	Hatun	Edric and others	Saswalo, under Henry de Ferrars
Hayfield	Hetfelt	– – –	The King
Hazlebage	Heselebec	Lewin	William Peverel
Heanor	Heinoure	– – –	Warner, under William Peverel
Heathcote, in Gresley	Hedcote	Elric	Nigel de Statford
Hilton	Hiltune	Ulurie and others	Robert, under Henry de Ferrars
Hognaston	Ochenavestun, a berwick of Ashbourn	The King	The King
Holbrook	Holebroc	Siward	Henry de Ferrars
Hollington	Holintune	Lepsi, Elfag and others	The Abbot of Burton
Holmsfield	Holmesfelt	Swain	Walter Deincourt
Holm Hall	Holun, a berwick of Bakewell	– – –	The King
Holm, in Brampton	Holun	Dunnine	Ascuit Musard
Hoon	Hougen	– – –	The Abbot of Burton
———	Hoge	Ulsi and Godwin	Saswallo, under Henry de Ferrars
Hopton	Opetune, a berwick of Wirksworth	– – –	The King
Hopwell	Opewelle	– – –	Ralph Fitzhubert, under the Bishop of Chester
Horsley	Horselie	Turgar	Ralph de Burun
Houghton, Stoney	Holtune	Swain Cilt	Walter Deincourt
Hucklow	Hochelai	Ernvi and others	William Peverel
Hulland	Hoilant	Tochi	Geoffry Alselin
Hungry Bentley	Bencleie	Uluiet and Ulchel	Ralph, under Henry de Ferrars
Ible	Ibeholun, a berwick of Mestesford (Matlock)	– – –	The King
Ilkeston	Tilchestune	Ulf Fenise, Toli and Osmund Benz	Osmund, under the King Malgar, under Gilbert de Gand and the King's Thanes

Modern Name.	*Ancient Name of Manors and Lands.*	*Possessors in the reign of Edward the Confessor.*	*Possessors when the Survey of Domesday was taken.*
Ingleby	Englebi		The King, Ralph Fitzhubert, Nigel de Statford
Ireton, Kirk	Hiretune, a berwick of Wirksworth		The King
———, Little, near Kedleston	Iretune	Godwin	Orme, under Henry de Ferrars
Ivenbrook	Winbroc	Chetel	Henry de Ferrars
Kedleston	Chetelestune	Ulsi and Godwin	Gilbert, under Henry de Ferrars
Kilburn			Hugh de Burun
Killamarsh	Chinewoldemaresc	Ælwold, Godric & others	Ascoid Musard, The King's Thanes
Kinder	Chendre, part of Longdendale	Godric	The King
King's Newton	Newetun	Algar	The King
Kniveton	Chenivetun	Earl Siward	Hugh Earl of Chester
Lea	Lede		Ralph Fitzhubert
Langley, Kirk	Langeleie	Levenot and Chetel	The King and Warner, under William Peverel
———, Meynell	Langelei	Levenot	Ralph Fitzhubert
Linton	Linetune	Leuric	Henry de Ferrars
Litchurch	Ludecerce		The King
Littleover	Ufre Parva	The King	The Abbot of Burton
Litton	Litun	Lewin	William Peverel
Longdendale	Langenedale	Ligulf	The King
Longstone	Langesdune, a berwick of Bakewell		The King
———, or Longsdon	Longesdune	Colne	Henry de Ferrars
Lown, now Heath	Lunt	Steinulf	Roger de Poictou
Ludwell	Lodowelle	Elsi	Henry de Ferrars
Ludworth	Lodevorde, part of Longdendale	Brun	The King
Lullington	Lullitune	Anti	Edmund, under the King
Mackworth	Machevorde, a berwick of Markeaton	Earl Siward	Gozelin, under Earl Hugh
Makeney	Machenie	Siward	Henry de Ferrars
Maperley	Maperlie	Staplevine	The King
Mapleton	Mapletune, a berwick to Ashbourn		The King
Markeaton	Marchetone	Earl Siward	Hugh, Earl of Chester
———	Marchetune	Aldred	Henry de Ferrars
Marston	Merstun	Brun and Elric	The Monks of Tutbury, under Henry de Ferrars
Matlock	Meslach, a berwick of Mestesforde		The King
Measham	Messeham		The King
Melbourn	Mileburne	The King	The King
Mercaston	Merchenestune	Gamel	Robert and Roger, under Henry de Ferrars
Mestesforde	Supposed to have been near Matlock		The King
Mickleover	Ufre	The King	The Abbot of Burton
Middleton	Middletune, a berwick to Wirksworth		The King
———, near Yolgrave	Middletone	Levenot	Ralph Fitzhubert
———, Stoney	Middletune	Goded	The King, under Ralph Fitzhubert
———	———	Dunnine and Elfin	Henry de Ferrars
Millford	Muleford	Siward	Henry de Ferrars
Milton		Earl Algar	The King
Monyash	Manels, a berwick of Bakewell		The King
Morley	Morlei	Siward	Henry de Ferrars
Morton	Mortune	Swain Cilt	Walter Deincourt
Mosborough	Moresburgh		Ralph Fitzhubert
Mugginton	Mogintun	Gamel	Chetel, under Henry de Ferrars
	Muchedes, near Wormhill	Siward	Henry de Ferrars
	Muchdeswelle, a berwick of Hope		The King
Newbold	Newebold		The King
Newton, in Blackwell	Neutone	Leuric and Levenot	Ralph Fitzhubert
——— Grange	Neutune	Osmer	Henry de Ferrars
Norbury	Nortberie	Siward	Henry de Ferrars
Normanton	Normantune	Leuric, Gamel & Teodric	Amalric, under Henry de Ferrars
——— in Scarsdale	Normentune	Elfag	Edwin, under William Peverel
———, near Derby	Normanestune		The King
———, Temple	Normantune	Lewin and Edwin	The King
North Winfield	Winnefelt		Walter Deincourt
Norton	Nortune		The King

Modern Name.	*Ancient Name of Manors and Lands.*	*Possessors in the reign of Edward the Confessor.*	*Possessors when the Survey of Domesday was taken.*
Norton, Little	Nortun	Godeva and Bada	Ingram, under Roger de Busli
Oakerthorp	Scochetorp	Leuric and Levenot	Ralph Fitzhubert
Ockbrook	Ochebroc	Tochi	Geoffry Alselin
Offcote	Ophidicotes, a berwick of Ashbourn		The King
Offerton, in Hope	Offretune, a berwick of Hope		The King
Ogston	Oughedestune	Swain Cilt	Walter Deincourt
———	Ougedestun		Ralph Fitzhubert
Osleston	Oswardestune	Ernvi and Lewin	John, under Henry de Ferrars
Osmaston, near Derby	Osmundestune	Osmund	The King and Henry de Ferrars
———, near Ashbourn		Wallef and Ailict	Elfin, under Henry de Ferrars
Packington	Pachinetone	Leofric, Earl of Mercia	Abbey of St. Mary's at Coventry
Padfield	Padefeld, part of Longdendale	Levine	The King
Palterton	Paltretune	Levenot	Ralph Fitzhubert
Parwich	Pevrewic		Colne, under the King
Pentrich	Pentric	Levenot	Ralph Fitzhubert
Pilsbury, in Hartington	Pilesberie	Elsi	Henry de Ferrars
Pilsley, in N. Winfield	Pinneslei	Swain Cilt	Walter Deincourt
Pinxton	Esnatrewic	Aldene	Drogo, under William Peverel
Potlock	Potlac, a berwick of Over		The Abbot of Burton
Priestcliff	Presteclive, a hamlet of Bakewell		The King
Quarndon	Cornun		Certain Clerks of Derby
Radborne	Radburne	Ulsi	Henry de Ferrars, Ralph Fitzhubert claiming one-third
Ravenstone	Ravenstun	Godric	Nigel de Statford
Repton	Rapendune		The King
Ripley	Ripelie	Levenot	Ralph Fitzhubert
Risley	Riselei, or Riseleia	Lewin, Ulsi	The King's Thanes and Fulc, under Roger de Busli
Rodsley	Redeslei	Brune	Henry de Ferrars
———	Redlesleie		The Abbot of Burton
Rosleston	Redlavestun	Earl Algar	The King
Roston	Roschintone	Siward	Henry de Ferrars
Rowland	Ralunt, a berwick of Ashford		The King
Rowsley	Reuslege, a berwick of Bakewell		The King
Rowthorn	Rugetorn	Ulsi and Steinulf	Roger de Busli
Sandiacre	Sandiacre	Toli, Cnut and others	The King's Thanes
Saperton	Sapertune	Godric and Lewin Cilt	Roger, under Henry de Ferrars
Sawley	Salle		The Bishop of Chester
Scarcliff	Scardeclif	Levenot	Ralph Fitzhubert
Scropton	Scrotun	Tochi	Henry de Ferrars
Sedsall	Segessale	Ulurie	Alcher, under Henry de Ferrars
Shardlow	Serdelau		Uctebrand, under the King
Shatton	Scetune, a berwick of Hope		The King
Sheldon	Scelhadun, a berwick of Ashford		The King
Shipley	Scipelie	Brun and Odincar	Malgar, under Gilbert de Gand
Shirland	Scirelunt	Leuric	Warner, under William Peverel
Shirley	Scirelei	Chetel, Ulme and others	Henry de Ferrars
Sinfin	Sedenefeld	Ulchel	William, under Henry de Ferrars
Shottle, in Duffield	Sothelle	Gamel	Godric, under Henry de Ferrars
Smalley	Smalei		The King
Smisby, or Smithsby	Smidesby	Edwin	Nigel de Statford
Snelston	Snellestune	Levenot, Elfric & others	The Abbot of Burton and Henry de Ferrars
Snitterton	Sinitretone, a berwick of Mestesford		The King
South Winfield	Winefeld	Elnod	Robert, under Earl Fitz-Alan; and Alan, under William Peverel

Modern Name.	*Ancient Name of Manors and Lands.*	*Possessors in the reign of Edward the Confessor.*	*Possessors when the Survey of Domesday was taken.*
Spondon	Spondune	Stori	Henry de Ferrars
Stanley	Stanlei	Ulfar	Robert Fitz-William
Stainsby, in Ault Hucknall	Steinsbi	Steinulf	Roger de Poictou
Stapenhill	Stapenhille	Godric	The Abbot of Burton and Nigel de Statford
Stanton	Stantune	Godric and Raven	Henry de Ferrars
———	Stantun	Edward	Ernvi, under the King
——— by Dale	Stantone	Ulf Fenisc	Malgar, under Gilbert de Gand
——— Ward, in Stapenhill	Stantun	Alwin	Henry de Ferrars
Staveley	Stavelie	Hacon	Ascuit Musard
Stenson	Steintune	Leuric	Henry de Ferrars
Stoke	Stoche, a berwick of Hope	– – – – –	The King
Stretton, in Shirland and North Winfield	Stratune	Leuric and Levenot	Robert, under Ralph Fitzhubert
Stretton in the Fields	Streitun	Æluric	Roger, under Henry de Ferrars
Sturston, in Ashbourn	Stertune	Ulchil	Roger, under Henry de Ferrars
Sudbury	Sudberie	Godric, Uluric and Elmer	Alcher, under Henry de Ferrars
———	———	– – – – –	The Abbot of Burton
Sutton in the Dale	Sudtune	Steinulf	Roger de Poictou
———	———	– – – – –	Roger de Poictou
——— on the Hill	———	Tori, Elwold and others	Wazelin, under Henry de Ferrars
Summersal	Sumersale	Ormer and Ernich	Ulcher, under Henry de Ferrars
———	– – – – –	Elric	Alric, under Henry de Ferrars
Swadlingcote	Swardingescotes	Godric	Nigel de Statford
Swarkstone	Suarchestun	Gamel and others	Henry de Ferrars and the King
Taddington	Tadintune, a berwick of Ashford	– – – – –	The King
Tansley	Taneslege, a berwick of Mestesford	– – – – –	The King
Tapton	Taptune, a berwick of Newbold	Bada	The King
Thornset	Tornesete, a part of Longdendale	Ligulf	The King
Thorp	Torp	– – – – –	The King
Thurlston, in Elvaston	Torulfestune	Tochi	Geoffry Alselin
Thurvaston	Torverdestune	Ulchel	Elfin, under Henry de Ferrars
———	Turvurdestune	Hedul	Robert, under Henry de Ferrars
Tibshelf	Tibecel	Ligulf	Robert, under the King William Peverel, keeper
Ticknall	Tichenhalle	– – – – –	The King
Tideswell	Tideswelle, a berwick of Hope	– – – – –	The King
Tissington	Tizinctun	Ulchil, Edric and others	Henry de Ferrars
Totley	Totingelei	Tolf	The King's Thanes
Trusley	Toxenai	Ulchetil and Avic	Hugh, under Henry de Ferrars
Tunstall	Tunestalle	Steinulf	Roger de Poictou
———	Tunestal	Levenot	Ralph Fitzhubert
Tupton	Topetune	– – – – –	The King and the King's Thanes
Twyford	Tuiforde	Leuric	Henry de Ferrars
Ufton	Uftune	Leuric	Warner, under William Peverel
——, in South Winfield	Uffentune	– – – – –	Nigel, under Ralph Fitzhubert
Unstone	Onestune	Lewin and Edwin	The King
Upton	Upetun	– – – – –	The King
Wadshelf	Wadescel	Wade	Walter Deincourt
———	– – – – –	Dunnine and Branwin	Ascuit Musard
Wallston, in Duffield	Walestune	Gamel	Godric, under Henry de Ferrars
Walton on Trent	Waletune	Earl Algar	The King
——, in Scarsdale	– – – – –	Hundulf	The King
Wednesley, or Wensley	Wodneslie, a berwick of Mestesford	– – – – –	The King
Welledune	Welledene, a berwick of Wirksworth	– – – – –	The King
Wessington	Wistanestun	– – – – –	Levine, under Ralph Fitzhubert
———	– – – – –	Swain Cilt	Walter Deincourt

Modern Name.	*Ancient Name of Manors and Lands.*	*Possessors in the reign of Edward the Confessor.*	*Possessors when the Survey of Domesday was taken.*
Weston on Trent	Westone	- - - - -	The King
——— Underwood	Westune	Ulfi - - - -	Gilbert, under Ralph de Burun
———	- - - - - -	Earl Algar - - -	The King
Whitfield	Whitfeld, a part of Londendale	- - - - - -	The King
Whittington	Witintune, a berwick of Newbold	- - - - - -	The King
Whitwell	Wittewelle	Levenot - - -	Ralph Fitzhubert
Willesley	Winleslei	Aluric - - - -	The King and Henry de Ferrars
Williamsthorp	Wilelmestorp	Swain Cilt - - -	Walter Deincourt
Willington	Willetune	Leuric - - -	Ralph Fitzhubert
Wingerworth	Wingreurde	- - - - - -	The King
Winshall	Wineshalle	- - - - - -	The Abbot of Burton
Winster	Winsterne	Leving and Raven -	Henry de Ferrars
Wirksworth	Werchevorde	- - - - - -	The King
Wormhill	Wruenele	Earl Siward - -	Henry de Ferrars
Wyaston	Widerdestune	Earl Edwin - - -	Henry de Ferrars
Yeaveley	Gheveli	Ligulf - - - -	Alsi, under H. de Ferrars
Yeldersley	Geldeslei	Ulchetel and Godwin -	Cole, under H. de Ferrars
Yolgrave	Giolgrave	Colle and Chetel - -	Henry de Ferrars

The only estates which have continued in the descendants of those who were their possessors at the Domesday Survey, are some manors of the Gresley family, which have passed to them in an uninterrupted succession from their ancestor, Nigel de Statford. The greater number of the estates of Henry de Ferrars were parcelled out among his retainers not long after the date of this Survey, by Henry de Ferrars, and his son, Robert, the first Earl Ferrars. Among those who had grants from the former, we find the ancestor of the Fitzherberts, who still possess the estates then granted. The manors which were retained by the Ferrars family in their own hands were forfeited by Robert, Earl of Derby, in the reign of Henry III. and became parcel of the Duchy of Lancaster.

Ralph Fitzhubert was ancestor of the Frechevilles, who continued to possess estates in Derbyshire till the extinction of the family, in the reign of Charles II. The estates of Walter Deincourt continued in his descendants till they became divided between coheiresses, in the reign of Henry VI. The estates of the Barons Musard passed to coheiresses in the reign of Edward II.; a marriage with one of them increased the landed property of the Frechevilles. The estates of William Peverel, Geoffry Alselin (the heiress of whose family married Bardolf) Ralph de Burun, and Roger de Busli passed out of those families at an early period.

Among the possessors of considerable landed property in the reign of Henry II. we find only the Shirleys and Curzons who retain any part of it at the present day.

(No. 12.)

"THE Commons in Parliament complained, that the land then swarmed with pilours, robbers, oppressors of the people, man-stealers, fellons, outlaws, ravishers of women, unlawful haunters of forrests and parks, &c. Whereupon it was ordered, for the suppression of present and preventing of future mischiefs, that certain commissioners should be impowered in the county, to summon all persons of quality before them, and tender them an oath, for the better keeping of the peace and observing the king's laws, both in themselves and retainers." *Fuller's Worthies of England.*

It is supposed, that this enactment was intended principally to detect and suppress those who favoured the title of York, which then began to be set on foot, and afterwards openly claimed, and at last obtained the crown.

The names of the Gentry of the County of Derby, returned by the Commissioners in the 12th of Henry VI. 1433.

William Keyworth, Bishop of Coventrie and Lichfield.
Henry de Grey, de Codnore.
Richard Vernon, } Knights for the Shire.
John Cokayne, }

The Commissioners to take the Oathes.

Abbeny John
Aleyn William, de Norton
Allibon John
Amori John
Atkin Sannyer, de Walmersho
Attewood Ralph
Babyngton Thomas
Bagshaugh Ralph, de Cunbes
Bagshaugh William, de Chapel-en-le-Frith
Bagshaugh Thomas, de Rigge
Baker Richard
Baker John
Balgy John, de Aston
Bancroft Henry
Barker John, de Dore, gent.
Bate John
Batesson Ralph
Baxter Nicholas
Benet John, brazier
Bishaugh Robert, de Sutton
Bothe John, de Elmeton, gent.
Bothe Henry, Armiger
Bothe del J. de Chalesworth
Botonne William
Bower John, sen.
Bower John, jun.
Bradbourne Henry
Bradbury Ralph, de Oldresset
Bradbury Roger, de Eadem
Bradshaugh Robert, de Wyneley
Bradshaugh Edward, de Eadem
Bradshaugh William, de Tiddeswall
Bradshaugh Nich. de Tiddeswall
Bradshaugh Henry, de Eadem
Brailesforth John
Brown Richard, skinner
Brown Nicholas, de Mershe
Brythrechefold de Hen. Armiger
Bullock William
Bullock William, de Norton
Budde William
Burton William
Burton John
Butler John
Bywater John
Callcroft Richard, de Chesterfield
Callcroft Thomas, de Eadem
Calton Roger, de Edensore
Capronn John
Carrington Robert
Cartwright William
Chaloner Nicholas
Caus Thomas, gent.
Chester John
Chestershire John
Clappewell Ralph
Claybrook Giles, vicar of Castelton
Claybrook Thomas, de Eadem
Clerk Robert, smith
Colyn Richard, de Eyham
Coln Roger, de Edensore
Cokfeld Robert
Colleman Richard
Cooke John
Cooke John, de Edensore
Cooke Thomas, de Eadem
Cooke Henry
Cowhope Roger
Crabbe Henry
Crewker John
Crosse de William, de Hilton
Curson John, de Croxhale
Curson John, Armiger
Cust Nicholas
Cutteler William
Dantre John, de Hatton
Delkere Richard, de Eadem
Delmere John, de Eadem
Delmore William, de Grenhul
Derley Henry
Dethyk William, de Braidesall
Deye John, Couper
Dikkesson Ely, de Eadem
Draper Thomas
Dunston John
Elton John
Elton John, jun.
Elyson John
Euyngton Robert
Eyre del Nicholas, de Hope
Eyton Richard
Fassakirley John
Fitzherbert Nicholas
Fitzherbert John
Fletcher Thomas, de Manyashe
Folliambe Thomas, Armiger
Fox Thomas, de Aston
Fox John, de Barleylees
Fox Thomas, de Banford
Francys Robert, Armiger
Franceys I. de Tykenall
Franceys Ingram
Franceys Richard, de Stanton
Godhale John, sen.
Goldsmith William
Grandon John, de Eadem
Grandon John, de Denby
Greaterler John
Grene de Ken Walmersho, W.
Gresley Thomas, Chivaler
Gretray John, de Elton
Gyles Ralph
Hall de Thurstan
Halley Oliver, de Aston
Halmworth J. de Stanley
Halom John
Hankeston ——
Hardwick William, gent.
Harison John, de Egynton
Hasellherst Robert
Hatton John
Hawe Roger, de Elton
Hayr Robert, de Padley
Hayr William, de Eadem
Hekedonne William, jun.
Hegge John
Hegge John
Henster Thomas
Hewster Robert
Hide John, de Longlee
Hikedonne William, sen. de Eadem
Hoke John
Hollond Henry, de Caldwale
Hollond Nicholas, de Lye
Houghton John
Huchonson Ralph, de Eadem
Hugate Thomas, de Chesterfield
Hye Thomas
Hudgray Robert
Jackson William, de Hassop
Johnsill Nicholas, Armiger
Johnson Edmund
Johnson William
Keye Richard
Keys Richard
Keys Gilbert, de Spondon
Kingesson William
Kneton Robert
Kneton Henry, Armiger
Kneton Thomas, de Mercaston
Lacy Edmund
Lacy Nicholas
Lathebury John
Leche Ralph, de Padley
Leek John, Armiger
Lemestre William
Lemestyr William
Leymestyr John
Litlechirch John
Lockyer John, sen.
Lockyer John, jun.
Lye James, de Fernely
Lymster William
Lynacre John, Armiger
Lynacre William, gent.
Madley Richard
Makworth Henry
Makworth Thomas
Manyashe John, glover
Manyashe William, de Manyashe
Mariori Thomas, de Bellesouer
Marshal John, de Egynton, gent.
Marshal Thomas, de Onlecotes, gent.
Maskyr William
Massy Roger, de Highlowe
Maysham Nicholas
Miller Robert, de Roddesley
Millner Robert, de Roddesley
Millner Richard, de Hagge
Mody Richard
Moseley John
Mountgomery Nicholas, Chivalir
Mountgomery William
Mountgomery John
Moynell Gerard
Nedham Thomas, de Foxlowe
Nedham John, de Wormhill
Newbolt Robert, gent.
Newham Ralph, de Castleton
Newham Thomas, de Eadem
Newham Thomas, de Flixton
Newham Richard, de Castelton
Noble J. de Holmeffeld
None Richard, de Hurdelowe
North Roger, de Babynhall
Northwode John
Nundi Robert
Orme William
Outrem William, de Holmfeld
Parker Robert, de Norton
Parker John, de Norton
Parker William, de Shirland
Paynter Thomas
Peek William
Peek Thomas
Peek Richard
Peek John, curriour
Pees John
Pen John
Perfy John
Perpoint Henry, chivalier
Persall John, tailour
Pesall John
Pole de la Peter
Pole de la Ralph
Pole de la Henry
Pont William
Potter Robert
Potter John
Prince Thomas, de Wyneley
Prynce Thomas, de Trusseley
Pynder Roger, de Pilleslay
Pynder William, de Eadem
Ragge William, de Bondon
Ratcliff Robert de Mellehour
Richardson John de Alsop
Roberd Thomas, brazier
Roleston John, de Lee
Roleston John, de Swarston
Roleston Henry
Rollesley John, sen.
Rollesley John, jun.
Ronyngton John
Ropere Richard, de Lytton
Rossel William
Roudolf William
Sale de Henry
Sale de Geoffry
Sancheverell John
Sanky Henry
Saperton Thomas
Satteby William
Scaley Nicholas
Seler William
Seliok Richard, gent.
Seriount R. de Dronfeld
Shagheuoc John
Shakerley John, de Great Longsdon
Shalcros de John, de Shalcros
Shaughe J. de Somersale
Shaughe Robert
Sharp John
Shepherd Henry

Shepherd William
Shirley Ralph, Armiger
Shore Robert
Shore Henry
Shoter Robert
Slack Henry, de Stanley
Slater Richard, de Brailesforthe
Smalley Robert
Smalley Richard
Smith John, Ferrour
Smith John, baker
Smith William, tailor
Smith William, de Egynton, gent.
Somer John
Spicer John
Spicer Roger
Spynkhull John
Stafford John, de Midleton
Stafford John, de Eyham
Stafford Richard, de Eadem
Stafford Henry, de Derley
Stanley Ralph, parson of Kirk-Ireton
Stanley Robert, smith
Stanley Thomas, ironmonger
Stanley Thomas, smith
Stathum John
Stepyngstones J. chaplain and vicar of Pentryche
Stokes Thomas
Stokkes Thomas
Stone John
Streily Hugh de Burg
Strelly John
Stretton John
Stykland Richard, de Ashover
Talliour Richard
Thorstell William
Trouche Thomas
Tunsted J. de Eadem
Twigg Richard
Twyforth Robert
Twyforth Walter
Tykhull John
Ulgerthorpe Simon, gent.
Ulgerthorpe William, gent.
Ulkerthorpe William, Armiger
Vernoun Robert
Wagstaffe Thomas, de Glossop
Wagstaffe Nicholas, de Eadem
Walker William
Walshe Thomas, de Stanley
Walker Richard
Wandell John
Warpeley Robert
Waren John
Webster John, de Bellesoure
Welbek John
Wennesley Robert, gent.
West John
Weyke Robert, de Hatton
Whitehalls Richard
Whitington John, gent.
Wilkinson Roger
Willesson Hugh, de Lytton
Winter Robert
Withwyth Thomas
Wode John, plasterer
Woderoffe Thomas
Woderof Robert, de Wormhill
Wodecok John
Wodeword John
Wolley Roger
Wolley Walter
Wolley Thomas, de Charlesworth
Wolley William, de Eadem
Wright Richard
Wyther John.

Copied from Fuller's Worthies, and arranged Alphabetically by WILLIAM BATEMAN, Esq. F. A. S.

(No. 13.)

From the Cottonian MS. Cleopatra, Chap. 5, fol. 59—64. (Retr. Review, 2. p. 518.) "Herafter floyon the names of the Captayns and Pety Captayns, with the Bagges in their Standerts, of the Aremy and Vantgard of the Kyng's Lefftenaunt entering in to France, the 16th day of June, in the 5th yer of the Reigne of Kynge Henry VIII, 1513.

Derby. Banerett—Sir Henry Savcheverell bayryth goulls a gett Buk sylver, made Banerett at thys tyme; and John Bradburn hys Pety Captayn.

——— Robert Darley bayryth goulls halff a Buk gold and sylver per pale, the hornes conter-colerd de l' une et l' auter, 3 barrs upon his nek, sabul unde or wave, issant owt of a wrayth goulls and sylver; and John Parker his Pety Captayn.

——— Nich. Fitherberd bayryth goulls and vert a hand with a gantlett gryphon sylver stondyng per pale; and John Irton hys Pety Captayn.

——— Sir John Leyk bayryth sylver, a Peycokes tayll; and Thomas Leyk, hys brodyr, Pety Captayn. The seid Sir John mad Knyght at Lylle.

——— Sir Thomas Cokyn bayryth sylver, a Coke goulls; and Robert Cokayn hys Pety Captayn. The seid Sir Thomas mad Knyght at Lyll.

——— Sir William Gresley bayryth assur a Lyon sylver passant, and gourds gold. John Gresley his Pety Captayn. The seid Sir William made Knyght at Lyll.

——— Robert Lynaker bayryth gold, a Greundes hed sylver and sabull quartered, the eyes goulls, wyth iiij Scalops counter-colerd upon the same hed; and George Palmer hys Pety Captayn.

——— Thomas Twyfford bayryth sylver, a Lyon rampyng sabull with a flourdelys upon hys shulder sylver; Roger Rolleston hys Pety Captayn.

——— Sir John Sowch of Codnour bayryth goulls, a Faucon 'splay'd syttyng upon a stok ragged gold, and a cressent assur upon the faucon, and an Asse hed goulls rassed and haltered, and a Grey (a Badger) in a tresse gold. Dave Sowch, hys brodyr, hys Pety Captayn. The seid Sir John made Knyght at Lyll.

——— Raulf Leych bayryth goulls, a hand holdyng a Serpent, and the Serpent wrython about the hand; and Richard Leych hys Pety Captayn.

——— Arthur Eyr bayryth vert, a Leg or a Botte sylver and goulls partie per pale, with a spur upon the helle gold; and Thomas Eyr, hys brodyr, hys Pety Captayn.

——— John Curson of Croksall bayryth a Cokatrice displayd, goulls with a hed in hys tayll, hys fette and hys wattelles assur. Edward Cumberford hys Pety Captayn.

(No. 14.)

A true relation of what Service hath beene done by Colonell Sir John Gell, Bart. for the Kinge and the Parliament, in Defence of the Towne and County of Derby, and how ayding and assisting hee hath beene to the adjacent Countyes, viz. Nottinghamshire, Staffordshire, Cheshire, Lancashire, Lincolnshire and Yorkshire, from October, 1642, *till October,* 1646.

The 11th of October, 1642, the above named Colonell Sir John Gell had a company of ffoot from Hull, contayning one hundred and forty. The 16th of the said moneth hee marched with his sayd company to Wheatfield, where the souldyers their mutined, but, by the intreaty of Capt. Bright, now Col. Bright, and the minister of the towne, many of them were disarmed, and the remainder sett in good posture. The 17th hee marched to Chesterfield, and their remayned eight or nine dayes, where hee raysed, by the beate of a drum, two hundred men, some with arms and some without. The 26th hee marched to Wirksworth, where Sir Ffrancis Wortley, with his rebel rout, hearing of his approach, fled away, but there Colonell Gell remayned three or four dayes, and increased his fforces to three hundred and above. And so the 31st of October, 1642, hee marched to Derby towne, and theire hee began to give out comyshons for his officers. Some five dayes after Captayne White came to him out of Nottinghamshire, with a company of dragoones, consisting of about twenty-seven, but before hee departed hee made them upp one hundred and forty, all well armed, under the command of the said Sir John Gell. About the 10th of November, 1642, the aforesaid Sir Ffrancis Wortley returned againe to the towne of Dale, in Derbyshire, whither Sir John, mounted his musquetiers and forced him out of the countrey. The 25th of November, having his regiment compleate, hee horsed about three hundred musquetiers with Captayne White's dragoones, and sent them by Major Mollanus to Coventrey for two saccers and some ammunition; when they came thither, they kept them five dayes their, because they had intelligence that the enemy were approaching towards the city. As soon as they returned to Derby Colonell Gell, having intelligence that the Earl of Chesterfield had fortified his house with forty musquetiers, horse and seven drakes, whereupon hee commanded forth of Derby some four hundred fforth, and Captayne White's dragoones and two sakers to the said Earle's house, called Bratby, Major Mollanus being commander in chiefe. Uppon the approach of our men, the enemy shott their drakes and musketts at them; but after halfe a dozen shotts of our saccers and musquetiers, and our men beginning to fall upon their workes, the said Earle with all his fforces ffled away through his parke and so to Litchfield. Wee, forsably entring the house, found his Countess, her gentlewoman and two or three servants therein, seized presently uppon the armes, and found seven drakes, thirty steele pikes, twenty or thirty musquetts, five double barrells of powder and good store of match and bulletts. Major Mollanus, Captayne White, Captayne Sanders and divers other officers entreated the Countess that shee would give every souldyer halfe a crowne, for to have her house saved from plundering, because it was a free boottey. Shee answered, it was too much, and that shee had not so much monyes; they asked her againe if shee would give amongst them forty marks: shee made the same answer, that she had not monyes. Then they offered to deposite the money for her, if shee would promise to repay it them: she still refractoroly and willfully said, that shee would not give them one penny; and then indeed the souldyers plundred the house. But the said officers saved her owne chamber, with all the goods therein. Then Derbyshire being cleared, Captayne White went to Nottingham Castle, seized uppon all the armes, and sent to Sir John Gell immediately to assist him, with some ffoott, whereuppon hee sent his Major Mollanus with three hundred ffoott, when he began to fortefie Nottingham and sett them in a posture of defense, and assisted Colonell Peirpoynt to make up his regiment of ffoott, and wee continued their some nine or ten dayes: in the intervale Sir John Gell having intelligence that Colonell Hastings was come to Ashby-de-la-Zouch with three hundred horse and four hundred ffoott, and still raysing as many as hee could, sent for the said Major Mollanus with his three hundred ffoott back againe to Derby, and by that tyme Hastings was fortefiing Sir John Harpur's house and Swarkestone bridge, whereuppon hee prepared his whole regiment with Sir George Gresley's troope of horse, which hee had raysed since Captayne White went from Derby to Nottinghamshire, and soe having two saccers along with him hee marched thither, stormed their workes, drove the enemy away, and dismantled the same, killed seven or eight of them and wounded many, and but one man of his wounded, soe that the enemy never had a mind to fortifie the same againe. He was no sooner returned to Derby, but the moorlanders in Staffordshire came to him, entreating him for assistance, because the enemy had possessed themselves in Stafford towne. Sir John asked them what assistance they would have; they

said two hundred musquetiers and one saccer, not doubting but that they had men enough, with that assistance, to regayne the towne, and to save themselves. Hee commanded his said Major Mollanus immediately with two hundred ffoott and one saccer to march towards their appointed rendezvouz, att Uttoxeter. His Major being their two or three dayes, and nobody coming to assist him, and hearing that the enemy increased, was forced to retreate in the night to Derby, being vi. long miles:* in the meane tyme Colonell Hastings strongly fortefyed Ashby-de-la-Zouch, which was, and would be, a great hinderance to Leicestershire, Staffordshire and Derbyshire. My Lord Grey sent to him, that hee should make ready with all the fforces he could make, and that Sir William Brereton was likewise to meete him with some forty horse, to goe against the said Ashby, within two dayes after hee mett my Lord Grey with all the strength hee had, and joyning their fforces togeather, they marched to the said Ashby, where they found the towne fortefyed, assaulted it, and beate the enemy into the mansion-house, with the loss of four or five men of our side, and one leiftennant of ffoot of ours wounded; and having gotten the towne, wee planted our ordnance against the mansion-house, but before they could doe any execution, their was a letter brought to my Lord Grey from the committee of Northampton, how that Prince Rupert was marched from Banbury to come to relieve the said Ashby, whereuppon my Lord called a councell of warr, and by the said councell it was agreed, that they should drawe off, finding themselves too weake.

February 24th, 1643, by an order from his excellence, the late Earle of Essex, he was commanded to send what strength hee could well spare under the command of Major-Generall Ballard against Newarke, whereuppon hee sent Major Mollanus with five hundred ffoott, because one ffoott company of his regiment, under Captayne Mundy, was commanded to Yorkshire, Captayne Stafford with his ffoot company at Whalybridge uppon the borders of Lancashire and Cheshire, and his said Major's owne ffoott company at Burton uppon Trent, and left in Derby only Captayne Mellor's ffoott company, and Sir George Gresley's troope to defend the towne. Whilest these his fforces were soe abroad, and himselfe att Derby, their came newes to him, how my Lord Brooks had entred Litchfield and beseidged the cloase, who, by reviewing the workes, was their unfortunately slayne, and presently after his death, my said Lord's officers made choyse of Colonell Gell to bee their commander in cheife for the present service. Hee went immediately with Sir George Gresley's troopes to Litchfield, and approched to the cloase with our morterpeece as neare as possably hee could, and after hee had shott three granadees they fell to parlee and surrendred the cloase and themselves prisoners unto him. In the meane tyme the said Major Mollanus returned with his ffoott from Newarke, and came to him at Litchfield, and soe Colonell Gell, asking him howe they had prospered before Newarke, hee answered that hee redily thought they were betrayed by the commander in cheife, which was Major-Generall Ballard, for that they had entred the towne and mastred the workes, and then commanded back, by the said Ballard, without doing any thinge att all, and soe returned with the losse of some men and one drake, and had nott Nottingham men and his stood against the said Ballard's will, closely one to another, they had lost all their ordnance, which they fetched off, whether hee would or not. And when hee had gayned Litchfield cloase, and sett all in good order, Sir William Brereton sent him a letter to meete him at Hopton Heath, near Stafford, with all the strength hee could make, to goe against Stafford towne, and soe they marched togeather towards Hopton Heath, where Colonell Gell commanded all the ffoott, and Sir William Brereton the horse; presently they descryed the enemy, whereuppon hee sett his ffoott in order of battalis, and Sir William his horse, the enemy advancing in a full body with above one thousand two hundred horse, whereof the Earle of Northampton was generall, and soe setting uppon their horse, Sir William's horse presently rann away, and left Sir John Gell alone with the ffoot. The enemy drew his horse into a body againe, and charged his ffoott, but hee gave them such a salute, that the enemy, in a disordered manner, drew off and marched away towards Stafford, but left many dead bodies behind them, whereof my Lord of Northampton was one, Captayne Middleton and many other brave commanders of horse, and at least one hundred dragoones; and of our side three carters and two souldyers were slayne, wee lost two casks of drakes, which the dragoones had drawne a great distance from the ffoott, under the hedges to save themselves, and soe Colonell Gell retreated with my Lord's dead body towards Uttoxeter, with his fforces, and Sir William Brereton with his fforces towards Cheshire. And att Uttoxeter Colonell Gell remayned three dayes, and sett Staffordshire in as good posture as hee could; within the said three dayes their came a trumpetter to him from my younge Lord of Northampton, for his father's dead body, whereuppon hee answered, if hee would send him the drakes which they had gotten from their dragoones and pay the chiurgeons for embalming it, hee should have it: but hee returned him an answer, that hee would doe neither th' one nor th' other, and soe Colonell Gell caused him to be carried in his company to Derby, and buried him in the Earle of Devonshire's sepulcher in All Hallowes church. April 8th, 1643, Colonell Chadwicke having gotten some three hundred of Yorkshire and Scarsdales horse togeather, sent word to Colonell Gell that my Lord of Deincourt did usually send assistance to Boulsouer, and was fortefying his own house, hee, in all the haste hee could, sent his Leiftennant Colonell,

* Probably *leagues*, as Uttoxeter is about six leagues, or eighteen miles from Derby.

Thomas Gell, and his Major with five hundred men and three peeces of ordnance to the said Lord Deincourt's house; and att their coming my Lord stood uppon his defence, but in the conclusion Leiftennant Colonell Gell tooke the house, and my Lord and all his fforces, with the loss of two or three men of our side. My Lord promised faithfully uppon his honor to come within eight dayes next after to Derby, and submitt himselfe to the Parliament's censure, but Leiftennant Colonell Gell demolished the workes which were about the house, and soe retreated to Derby, but hee was no sooner marched away, but my Lord went to Newarke, and never came to Derby, for all his honor, promises and protestations.

Presently after Colonell Gell sent to my Lord Grey, desiring his assistance for the taking of Burton, by reason it was the only passage over the Trent and Dove into the North. My Lord within two dayes came, and mett Colonell Gell att the rendezvouze, on Egginton Heath, and soe marched togeather to the said Burton, drove the enemy away, and Colonell Gell left one of his bigest ffoott companys their, consisting of two hundred, under Captayne Sanders, and one peece of ordnance, and presently after made sixty dragoones, and soe kept the passage.

About the beginning of May, 1643, their came a command from my said Lord Grey, that Colonell Gell should march with all his fforces and attillery and meete at the randezvouze att Nottingham, and soe uppon my Lord's command Colonell Gell marched thither with all his fforces and attillery, excepting one ffoott company, and their wee were put under the command of Younge Hotham, where then were present my said Lord Grey with his fforces, Colonell Cromwell with his fforces, and all Nottingham fforces, soe that in all wee were about five or six thousand horse and ffoott but the greatest parte of horse, and marched upp and down in the vale of Belvour for the space of one moneth till the Queene came to Newarke with great strength, and then my Lord Grey retreated towards Leicester, Cromwell towards Peter borrough, Colonell Hubbard with his regiment tarried at Nottingham, under the command of Sir John Meldrum, and Colonell Gell to Derby, because they conceived they were not able to encounter with the enemy for want of ffoott.

In the meane tyme that wee left Captayne Sanders at Burton, one Mr. Houghton, a Lancashire man, was made Colonell, and hee made the said Sanders his Leiftennant Colonell, soe that Colonell Gell lost that great company and above sixty dragoones horse and armes, which was a great losse to Derbyshire when the enemy were soe aboute us. The Queene being att Newarke, and understanding that wee were all soe dispersed, marched with her fforces towards Ashby-de-la-Zouch: Colonell Gell having true intelligence that shee was marching westwards, and that shee would fall uppon Burton, because it was the chiefe passage from South to the North, sent presently to Staffordshire for all the fforces to meete him, and likewise to Nottingham, where were about three thousand horse and ffoott, and hee himselfe would draw out with all his fforces to Egginton Heath, and soe to Burton, to assist them till the Queene were past, but noebody would come, soe that within three dayes after shee marched towards Burton, tooke the towne by storme, killed many of them, tooke the Colonell, Leiftennant Colonell, and most of the officers prisoners, and soe most miserably plundered and destroyed the towne.

The Queene was noe sooner departed out of Staffordshire but the countrey men sent to Colonell Gell, how that Sir Richard Ffleetwood had fortefyed his house, and encreased very strong both in horse and ffoott, and did great hurt in plundering the traffique betwixt Lancashire, Cheshire and Derby, by robbing and stopping of carriers, which went weekly from Manchester to London, hee sent presently his Lieftennant Colonell with about four hundred ffoott and one troope of horse to the said Ffleetwood's house, and tooke it by storme, and brought Sir Richard prisoner to Derby, with all his men, being betwixt seventy and eighty.

Within five weeks after Colonell Gell having intelligence how that Hastings was fallen out with one Raggard, governor of Litchfield, and departed from thence with such fforces as hee had to Tutbury, and their devoured all the provision they had; and that if Colonell Gell would come and besedge it for four dayes, with considerable strength, they must needs surrender it for want of victualls and ammunition, and by that meanes hee might release most of the prisoners taken at Burton, whereof Colonell Houghton was one. Uppon this intelligence Colonell Gell sent to Sir John Meldrum, at Nottingham, for assistance: Sir John Meldrum came presently to Derby, with Major Ireton, and Captayne White, with some two hundred horse and dragoones, and soe Colonell Gell marched along with them with all his fforces, horses, and ffoott, and artillery to Tutbury towne, and surrounded the castle; their wee remayned two dayes and one night. Sir John Meldrum calling a councell of warr, tould them how hee had intelligence that the Earle of Newcastle was sending fforces to relieve it out of Yorkshire and Bridge North, whereuppon it was resolved that wee should retreat to severall garrisons. Soe soon as Sir John Meldrum came to Nottingham, hee drewe all the fforces then in towne, excepting some four hundred, which hee left in the castle with Colonell Hutchinson, and marched southwards towards Peter borrough; but Nottingham townsmen sent for ayde to Colonell Gell to assist them, while they were removing their goods into the castle, for they were left in a most miserable condition: hee presently made ready three hundred dragoones and sent thither his said Major Mollanus, to continue there till they had removed their goods into the castle, and left the towne desolate, but some few of the townsmen within; awhile after newes came that the enemy had entred the towne,

and had beseiged the castle, the Governor with the Committee, did most earnestly send unto Colonell Gell, that he should with all speede send them assistance, otherwise the castle would be taken, because most of their souldyers were in the towne, and many an honest man would soe be starved, who had privily hid themselves. Sir John presently made ready all the strength hee could, and gott together all the horses in the countrey, and horsed some five hundred musquetiers, with the assistance of two or three troopes at Leicester, and soe with all that strengeth marched to Nottingham, Major Mollanus being commander in chiefe. The enemy was then at least five or six hundred in Nottingham towne, horse and ffoott, and stood all in battalio in the market-place, and all our fforces were not five hundred. The said Major Mollanus with Captayne Hacker, now Colonell Hacker, entred the towne with their horse, were presently beaten backe, lost four or five horses, instantly after the said Major broke thorrow the enemy and brought in the dragoones, and entred the towne againe, and drove the enemy before them, many of them slayne, and one hundred and sixty taken prisoners, but one man of our side slayne, which was namely one Captayne Leiftennant Lenerick, who led Colonel Gell's owne troope, three men wounded, and some five or six horses killed. Wee releived at the same tyme at least four hundred townsmen and souldyers of the castle, who were almost famished. The remainder of the enemy fled to Nottingham bridge, which they were then fortefying.

Within tenn dayes after, the Committee of Nottingham sent again unto Colonell Gell, that hee might needs send them present ayde and assistance to beate the enemy from the bridge, otherwise they would bee soe restrayned that theye would not be able to keepe the castle; the enemy possessing the bridge, the castle was to noe effect; Colonell Gell presently commanded between three and four hundred horse and dragoones to march to Nottingham and assist them, whereof Major Mollanus was chief commander; and thither went, and drove the enemy away, soe that it will be adgudged by any councell of warr, that Nottingham towne and castle had beene long since in the enemy's possession, had they not had the assistance of Sir John Gell in driving the enemy from them at every tyme of neede, as the Colonells and Committee of Nottinghamshire did ever acknowledge.

Within a while after, Colonell Gell had intelligence that Sir Thomas Ffairefax was come to Nottingham with two thousand horse; hee went thither to see him, and soe Sir Thomas Ffairefax tould him that he must goe to Wingfeld Mannor to communicate with some Derbyshire gentlemen, whereof one was Mr. Milward, which had beene a Captayne of the trayned band, to persuade him to take upp armes for the parliament: but it was too late, because hee had before taken Commission of the Kinge for a regiment of ffoott, as since it most apparently appeared. And this was tould Sir Thomas before, but hee would not believe it, but since hee found it to bee true; soone after Sir Thomas repaired to Derby with all his horse, and their continued for two or three dayes, and desired of Colonell Gell that hee would lett him have four or five hundred musquetiers to march with him towards Chesterfield, and from thence to Yorkshire; whereuppon he answered, that hee had not above five hundred men in Derby to defend the towne, and that Hastings had at that tyme at least two thousand at Litchfield, Ashby-de-la-Zouch and Tutbury, still looking for ann opportunity to surprise Derby, if his horses had marched out of it; because it was well knowne, that if Derby were taken, Nottingham could not long hold out, and then all the north side of Trente was lost. Nevertheless Colonell Gell tould him, that hee had one hundred men at Wingfield Mannor, whereof hee should have sixty; and Captain Taylor's Company, which was at Wingerworth, much about the same number; and of Captain Stafford's Company, who were at Chatesworth, forty; and Captain Hadfield's Company, to make them upp four hundred, wherewith he was well pleased, and soe marched towards Chesterfield, whereat came to him one hundred and twenty musquetiers of the number aforesaid.

Sir John Gell and the Committee ordered that Leiftennant Colonell and Mr. Hallowes, two of the said Committee, should repaire to Chesterfield for to provide such things as were necessary for Sir Thomas Ffairefax and his horses. As soone as they came thither, they had an allaram that the Earle of Newcastle, with all his fforces, were marching towards Derbyshire; whereuppon Sir Thomas gave orders, that his horse should retreat to Nottingham, and willed the two Committees to shift for themselves; and that this was noe countrey hee could defend with his fforces; and so hee left us, and went cleare away towards Leicestershire, whither Colonell Gell and the Committees did often write unto him; yea, and sent two of the Committee to intreate him to come and assist them, and that the Earle of Newcastle's fforces were not above two thousand at that instant in Derbyshire, with whom Colonell Gell could well deale, if hee had come in any tyme. Upon this hee made many promises, not only by word of mouth, but also under his hand-writing to the said Committees, who were with him at Melton Mowbery, and intreated Colonell Gell that hee would send some fforces to Lancashire and Cheshire, and soe to make a randezvouz, whither hee would come with all speed. Upon this, Colonell Gell sent Major Mollanus, with his horse and dragoones, which were about three hundred and fifty, towards Leeke; as they were marching towards Staffordshire, they had intelligence that the Earl of Newcastle's fforces were falne uppon the Morclanders in Hartington; then they hastened towards them as fast as they could; but before they could attagne thither, they had taken all the ffoott, being about two hundred and forty; and the horse rann all away; which prisoners Colonell Gell

afterwards released. And Newcastle's horse marching towards Leek, Mollanus fell uppon them, routed them, and tooke about thirty-five, and slew some five officers, and soe went on to Leek: where the inhabitants, before their coming, were ready to leave their houses and outrunn the towne; and there they were drawing altogether; and Major Mollanus continued their with his fforces fourteen days, all that while noe ayde came too him till the enemy pillaged to the very gates of Derby; and hearing that Sir Thomas Ffairefax was cleane retreated towards Peeterborrough, and noe hopes of his coming to them, Major Mollanus was forced to retreate to Derby with his fforces, without expectation of any ayde at all. And in his retreate, hee tooke att Ashborne twenty-six prisoners, of the Earle of Newcastle's fforces.

In the interim the Earle of Newcastle's fforces setts uppon Wingfield Mannor, in Dec. 7, 1643, and tooke it within some four dayes, because they could have no assistance of any; but yet Colonell Gell's horses and dragoones hardly rested; and in one day they tooke two troopes of horse, with their collours, in Wingfield towne, two captaynes and forty prisoners, within ten dayes after, they fell upon the guard of Newcastle, at Kilborne, and tooke one Major Wheeler, with ninety prisoners, all horsed, and their collours; a man paynted, and standing with a goold-axe under a greene tree, with this motto: *rout and branch;* which collours were afterwards sent to his excelencie, with many other collours of horse and ffoott, and soe by him presented to the parliament. As soone as the body of Newcastle's fforces were gone, Colonell Milward, with his regiment, saddled themselves on this side Bakewell; Colonell Eyre att Chatesworth, and att his own house in the Peake; Colonell Fitzherbert at South Wingfield and Tissington; Colonell Ffretyvisle, at his owne house and Scarsdale: Colonell Harpur, of Little Over, fortefied Burton bridge, whither Colonell Gell sent his Major Mollanus, the 6th of January, 1643, with some of his fforces, and tooke the towne and bridge, with all his whole regiment, horse and ffoott, except Colonell and Leiftennant Colonell, who rann away in the night; hee tooke withall, the major, six captaynes, and eight other officers, with five hundred common souldyers, without any loss of our side, but five of the enemy slayne at the entrance of the bridge.

And this day being the 5th of February, 1644, Colonell Gell and his fforces are before King's Mills, which Hastings fortefied, while the Earle of Newcastle's fforces were in the countrey; which King's Mills Colonell Gell tooke by storme, with about two hundred prisoners and soe many armes. Within six or seven dayes after, Colonell Gell having intelligence how the enemy at Bakewell and Tissington hall met every day at Ashborne, hindred the passage, and kept off the countrey people from the markett, sent Major Sanders with five hundred horse and dragoones thither, to cleare the passage; the enemy understanding that our men quartered at Ashborne, drew all the fforces they could together, thinking to surprise them: but our men having intelligence that the enemy was approaching, drew all our dragoones into the lanes and hedges, and charged them: and our horse falling on the reare of them, routed them all and pursued them to the towne of Tissington, and tooke one hundred and seventy prisoners, and many of them slayne. After this defeate they left Tissington and Bakewell, and went some to Ffretchvile and some to Chatesworth house, and some to Bolsover and Wingfeild Mannor.

On the 24th of February, 1644, by an especiall command from the Parliament, Colonell Gell sent all his horse and dragoones towards Newarke, under the command of Sir John Meldrum, where they continued about a month, that Prince Rupert raysed the seidge, and in that conflict Colonell Gell lost about two hundred horse and dragoones, with their arms, and the men all stript to their very skin, contrary to all articles of agreement.

After Prince Ruperts returne from Newarke to Ashby-de-la-Zouch, Colonell Gell had intelligence that some of his horse were come over the river Dove, and were plundering some townes about Egginton; he presently sent all his horse out towards Egginton heath, Captayne Rhoades being chief commander thereof. As soone as they came to the heath, the enemy appeared above six hundred strong, and ours but about three hundred and fifty; whereuppon, Colonell Gell having intelligence of the enemyes strength, sent presently Major Mollanus out with four hundred ffoott, towards Egginton heath, to lye in the lanes wayting, least his horse should bee forced to retreate, that they might be ready to fall uppon the enemy if they should pursue them; but before the ffoott came neare them, our horse most valiently had routed them, and driven them into Trent river, where many were drowned and slayne, and two hundred taken prisoners. In the beginning of April, 1644, Colonell Gell having order from the Parliament that forty peeces of ordinance were coming from London to Peeterborrough for him, and that hee should bee carefull to fetch them, with a good convoy; because the enemy being then very strong at Newarke and Ashby-de-la-Zouch, and had open passage to Grantham and Stamford, sent Major Mollanus with five hundred horse and dragoones towards Leicester, with a letter to my Lord Grey, that if their were any danger hee would assist them; presently after they came to my Lord Grey, hee drew them to a randezvouz within three miles of Leicester, with all his horse and dragoones in a body, having intelligence how the enemy were drawing towards Leicestershire from Banbury, Bridgenorth, Dudley and Litchfield, to meet them of Ashby-de-la-Zouch; my Lord commanded them to draw six miles westward towards Tamworth, to the enemyes randezvouz, where they tarried some four dayes; and soe the enemy, hearing of their beinge their,

their designe was frustrated. Then my Lord Grey commanded Major Mollanus to march with his horse and dragoones towards Peeterborrough, their to receive his charge; promising that hee would send his scoutts towards Newarke, and if any of them would stirr, hee would presently bee in the reare of them; and soe Major Mollanus marched safely to Peeterborrough, and brought the ordinance to Derby; presently after, there were letters sent from Sir William Brereton to Colonell Gell, how that Prince Rupert was past into the north to assist the Earle of Newcastle against my Lord of Manchester, my Lord Ffairefax and the Scotts, and that hee had order from the Parliament to pursue them, to assist our side with all the fforces hee could procure; soe that Colonell Gell sent him presently three hundred horse and dragoones, and Captayne Rhoades commander in cheife over them.

Within a moneth after, my Lord Grey and Colonell Gell appointed their randezvouz neare Wildon fferry, which lyeth in Leicestershire, where the enemy had made a strong ffort, and had above three hundred men in it for hindering the passage over Trent: and soe immediately environed the ffortt and planted there ordinance, and the next day made ready to storme it; but the enemy seeing their resolution, cried out presently, quarter for their lives, and soe they all yielded themselves prisoners; the ffortt demolished, my Lord Grey marched towards Leicester, and Colonell Gell to Derby. Soe hee sent his horse and dragoones to quarter close by Ashby-de-la-Zouch, and by that meanes tooke many prisoners, and they durst noe more sturr to robb carriers.

Within tenn dayes after, Colonell Gell sent to Nottingham to Governor Hutchinson and Colonell Thornough, for their assistance to beleaguer Wingfield Mannor, because it was as great an annoyance to Nottinghamshire as to Derbyshire; Colonell Thornough presently sent his Major, with troopes of horse, and met Colonell Gell, who brought all his ffoott and horse with him (except two companyes of ffoott which hee left in Derby) within a mile of Wingfield, and presently invironed the Mannor house; and about ten dayes after, Colonell Hutchinson sent two hundred ffoott. After they had layne fifteen dayes there, Colonell Gell had intelligence how the enemy at Litchfield, Tutbury, Ashby-de-la-Zouch and other garrisons, were gathering their fforces together about Burton, for to relieve the Mannor; he presently sent Sanders, Major of his horse, with all the horse and dragoones towards them, and to have an eye to Derby; our horse coming neare the enemy, and hearing that Colonell Eyre, his regiment, lay in Boylston church, our dragoones dismounted, and surprised the whole regiment in the church: and soe tooke men, arms, collours, and all without loss of one man on either side. And hearing that Colonell Bagort, governor of Litchfield, was with all his horse and ffoott at Burton, marching towards the randezvouz, our men presently left a guard of dragoones on the prisoners in the church, and marched with their horse towards Burton, and assaulted the enemy; and after two or three hott encounters, beate them cleare out of the towne, where there were five of our side slayne, and seventeen of the enemy, and many of them taken prisoners, and brought backe to Boylston church to the other prisoners, which made upp three hundred in all: and soe marched with them to Derby, with six ffoott collours and one horse collour, with all their armes; and soe our men and horse returned to the leaguer at Wingfeild Mannor againe; Colonell Gell finding that his ordinance would doe noe good against the Mannor, and understanding that Major Generall Craford had foure great peeces, sent two of his officers unto him, to desire him to send him them for three or four dayes for battering: and in soe doinge hee would doe the countrey good service, because it was a place that could not bee otherwise taken, without they were pined out. Major Generall Craford, desirous to doe the state and countrey good service, came presently with his ordinance and some horse and ffoott thither; and soe wee planted ours and their ordinance together, and after three houres battrey they yielded themselves, being about two hundred and twenty; and soe uppon composition, every one marched to his own home; and soe Major Generall Craford marched towards Lincolne, where the Earle of Manchester quartred, and Colonell Gell to Derby, leaving behind him in the Mannor two ffoott companyes and a troope of horse.

Presently after Colonell Gell had taken Wingfeild Mannor, all the enemyes scattered fforces, which were routed in Yorkshire, and belonging to Derbyshire, Leicestershire and Staffordshire, came to Litchfield, Ashby-de-la-Zouch and Tutbury, and began to robb and plunder in Derbyshire and Leicestershire; ffor preventing whereof, Colonell Gell sett upp a garrison at Barton Parke, opposite to Tutbury, in October, 1644, and soe kept Tutbury men in, that they could doe noe hurt to Derbyshire. Leicestershire Committee seeing this, sent to Colonell Gell for his assistance to sett up a garrison at Coleorton, within a mile, and opposite to Ashby-de-la-Zouch. Thereupon hee sent them all the horse and dragoones he could well spare; and soe continued there all the moneth of November, 1644, till it was perfected. The first of December next following, Sir William Brereton sent to Colonell Gell for assistance to beseidge Chester; hee presently sent him six troopes of horse and dragoones, who continued there till the latter end of March.

Within four dayes after, Colonell Rossiter and Governor Hutchinson sent to Colonell Gell for assistance, for an onslought which they had uppon Newarke men; whereupon Sir John sent them all the remaynder of his horse and dragoones, being six troopes; as soone as Nottingham men, Lincolne men, and our men were in the vale of Belvoyer, they presently descryed the enemy, horse and ffoott; charged and routed them, slew many of them, and drove

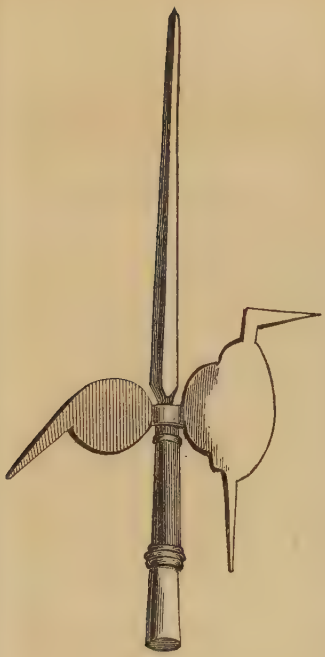
many of them into a brooke, that they were drowned; and Sir Richard Byron, then governor of Newarke, had much a doe to save himself, in running on ffoott to Belvoyer Castle, leaving his perriwicke behind him on the ground, many of them taken prisoners, and our troopes brought with them about thirty good horse to Derby, which made some satesfaction for our losse before Newarke; of this exployt, Colonell Rossiter was Commander in chiefe. About the latter end of December, 1644, the committee of both kingdomes sent an order to Sir John Gell, that hee should send all the horse and dragoones which hee could spare, to the assistance of blocking upp the north side of Newarke, under the command of Colonell Sanders, where they tarried till the midst of March. About the beginning of April, 1645, Colonell Gell's horse came backe from Chester: and the very same night, the Governor of Nottingham sent his letter, how Sir Richard Willis, Governor of Newarke, had surprised Nottingham bridge, and that hee entreated all the assistance hee could make, with all speede possabley; the next morning Sir John Gell sent all his horse and dragoones thither; within three and four dayes after, the Governor of Newarke finding that hee could not hould it, came with a good strength, and brought his men off backe to Newarke, soe that their was noe losse in regayning it, because the enemy left it.

In the beginning of May, 1645, the Kinge came to Litchfield and soe to Tudbury, and from thence sett before Leicester, and by storme tooke it. In the meane tyme theire came a letter from the Committee of both Kingdomes to Colonell Gell, that hee should draw to Nottingham with his horse and dragoones, where they had commanded all the horse and dragoones of Cheshire, Staffordshire, Nottinghamshire, and others to meete at the randezvouz att Nottingham, under the command of Colonell Gell, and hee, with the said fforces to follow the Kinge, what way soever hee marched. As soone as the fforces came together (which was att least fourteen dayes first) Colonell Gell advanced in the meane tyme; the Kinge was routed att Naysby, and his excellence, Sir Thomas Ffairefax, advancing towards Leicester, commanded Sir John Gell to lye with his fforces on the north side of it, and soe the towne of Leicester was surrendered, and afterwards hee dismissed Colonell Gell, and all the fforces that were under his command. Hee was noe sooner come backe to Derby, but their came a letter from the Committee of both Kingdomes that hee should march with his owne horse and dragoones to Coventrey, where they had commanded all the other fforces, which were formerly under his command, to meete him there; and when hee had marched as farr as Synfen Moore, part of his horse began to mutinie for want of money, and turned backe, nevertheless hee marched forwards with two or three troopes, and tarried there tenn dayes, and noebody coming to him hee returned backe again to Derby. Hee was noe sooner come home but Colonell Thornhaugh sent a letter unto him, that Welbecke was surprised by the enemy of Newarke, and that Colonell Ffretchvile was made Governor thereof, and gathered a greate strengeth, and therefore desired him, hee would send him all the assistance hee could for to keepe them in, before they were provided of provision, and that hee would meete them about Wingfeild Mannor. Sir John presently drew all his horse and dragoones together, and marched with them himselfe thither, and delivered them under the command of Colonell Thornhaugh, who tarried their a while and encountred twice or thrice with the enemy, and beate them, and tooke many prisoners. Uppon the Kinge coming to Derbyshire our fforces returned backe to Derby.

In the beginning of September, 1645, there came letters from the Committee of both Kingdomes, that Colonell Gell should keepe five hundred ffoott ready uppon an hower's warning, to marche towards Newarke, under the command of Colonell Generall Poynts, for the blocking upp of Newarke. In the meane tyme Staffordshire men sent unto Colonell Gell, that if hee would assist them with a considerable number of ffoott, they would beseidge Tudbury castle, whereupon hee assured them that hee would assist them with all the fforces hee had, but that as soone as hee received orders from Colonell Generall Poynts, seven hundred of his ffoott must bee ready at his command at an hower's warning, because hee had received such orders from the Parliament, for the blocking upp of Newarke. Notwithstanding hee sent his Leiftennant Colonell with four hundred ffoott to the rendezvouz, within a mile of Tudbury, where Staffordshire officers and ours mett together, and held a councell of warr, and found that it would bee at least a moneth's work, and therefore neither they nor wee could tarry so long about it, because of our former command, and for storming it, it was impossible, and soe returned to our severall garrisons.

Within two dayes after oure returne, the Kinge came with three thousand horse to Tudbury, and from thence to Ashborne, where our horse fell in the reare of them, and tooke a Major, much esteemed by the Kinge, and twenty-five prisoners, which Major was afterwards exchanged for one Major Gibb, who was Major over the horse in the associated countyes, by the Earle of Manchester's letter, and soe the Kinge marched through the High Peake to Doncaster.

The latter end of September, 1645, the Governor of Welbecke having gotten good strength by the Kinge coming that way, came to Derbyshire with three hundred horse and dragoones to sett upp a garrison in Chatsworth, and one Colonell Shallcross for Governor there, Colonell Gell having intelligence thereof sent presently Major Mollanus, with four hundred ffoott to repossess the house; and having layne their fourteen dayes, and hearing of the



demolishing of Welbecke, Bolsover and Tickhill castles, was commanded by Colonell Gell to return to Derby.

About the same tyme Sir William Brereton sent to Colonell Gell for his assistance to beseidge Chester, hee presently sent him six troopes of horse and dragoones, where they continued till it was taken, and returned to Derby in February next after.

And within tenn dayes after Sir William sent for them againe to the beseidging of Litchfeild, whither they went, and tarried their till the surrender thereof.

The 28th of October, 1645, Colonell Generall Poynts sent to Sir John Gell, according to the Parliament's order, that hee should send him his fforces to the randezvouz at Belvoyer in the vale, hee presently sent Major Mollanus with five hundred and twenty ffoott thither, who remayned under his command with one Captayne Leiftennant Drinkwater alone, till Newarke was surrendered, being the 8th of May, 1646, and then the said Major received order, from the Grand Committee before Newarke, to returne backe to Derby with his fforces and artillery.

In this service that wee were under Colonell Generall Poynts first storming of Belvoyer outworkes about the castle, of Colonell Gell's men eleven were slayne, and twenty-seven wounded; and for their service and valor in storming the said workes, the Parliament bestowed £40. amongst Derby souldyers to drinke.

And at Stoake, the 1st of January, 1645, four slayne and thirty wounded, whereof the Major's own Leiftennant was one, and three sergeants, and twenty-seven taken prisoners. Which skirmish continued from three of the clocke in the morning till six, that the enemy were beaten backe, having seventy-two of their men wounded and slayne, whereof was one Captayne Fforster; the enemy were one thousand ffoott and four hundred horse strong, and wee, from Derby and Nottingham, could not at that instant make five hundred ffoott betwixt us, and most of our horse ran away, but Captayne Pendocke who was sore wounded and taken prisoner.

In this skirmish Derbyshire ffoott stood most valiantly and courageously too it, soe that as soone as it was day, Colonell Generall Poynts gave them many thanks in the open feild, where they stood in batalio, for their courage and valor. And before Newarke wee left seven men and one wounded.

For all the aforesaid severall good services, done by Colonell Gell, his officers and souldyers, the horsemen were disbanded with £4. 6s. apeece, and the ffoott with £1. 6s. apeece, and the officers never a penny to this day, being most of them two yeares' pay in arreare, and therefore lett the world judge whether wee are well rewarded or noe; but the reason is, as I suppose, because the greater part of our Committee were of the Kinge's side till after the battell at Yorke, and especially our Sub-committee of array.

Note, The instrument here represented is a pole-axe, carried by Sir John Gell's foot soldiers, and is now in the possession of Philip Gell, esq. together with the colours borne by Sir John's detachment. Through the kindness of Mr. Gell we are enabled to lay Sir John Gell's Journal before the public.

The following is a different account of the transactions that took place at this period, taken from Sir George Gresley's Manuscript, now in the possession of the family.

A true account of the raysing and imployeing of one foote regiment under Sir John Gell, from the beginning of October, 1642.

"When the setters up, as wel as the lookers on, were wearye of the standard's longer stay at Nottingham, the king's first march was to Derby, the trayned bands of the country being commanded to attend him, which they did, and were disarmed for reward. This new army left such a force behynd them, that a couple of base strangers, one Dennis, and Ballard, papists in religion, and beggars by fortune, for their bouldness to settle themselves at Wyrksworth about the myddle of the county, upon pretence to raise souldyers for the king, began to robb and plunder without controule, though at that tyme we had four earles, one baron, and dyvers knights, and gentlemen, al liveing amongst us; with these two strangers dyvers of our owne county soone joyned, some popeishe in theyre religion, others of lewd lyfe and lyttle fortune, wherefore to prevent the miserable condition that our country was like to fall into, and the better to enable Sir John Gell to raise a regiment of foote, according to his excellency the Earle of Essex' commission, to him for a Colonell, Sir John, with his brother, Mr. Thomas Gell, his Leifetennant-Colonell, went about the end of September unto Hull to Sir John Hotham, by whose letter to his sonne, at Cawwood castle, were procured one foote company, with which we marched for Derbyshire. And in our way we weare importuned to helpe there at Sheaffeild to suppress a muteny there, which we did, and they lent us ould calivers wyth rotten stocks and rusty barrells, useless to them and of little service to us; for which they seised and took afterwards sixty good muskets of ours, as they came from Hull.

"During our absence Sir Francis Wortley, with a company of fellowes fyt for such a leader, with horse and armes, stoln from honest men, came and joyned with them at Wyrksworth; by which union of theirs they conceived themselves masters of the county, and, in confidence thereof, disposed of other men's houses and estates, for their wynter quarter; when, unexpected of them, Sir John Gell appears at Chesterfield, as much to the content of the wel affected as to the amasement of these robbers; within fewe dayes after Colonell Gell's first appearing at that towne, the Earls of Devonshire and Chesterfeild together with the then Hygh Sheriffe, Sir John Harpur of Cawke, Sir John Harpur of Swarkston, Sir John Fitzherbert of Norbury, Sir Edward Vernon, Sir Simon Every, and divers other gentlemen of our county, mett at Tutbury and sent a threatning letter to Colonell Gell for his comeing with forces into that countie, to which he returned an answer by their messenger, that it seemed strange they should growe so quickly jealous of hym, theyre owne countrieman, wel known to them, and that had no other end, then the cleareing of his county from theeves and robbers, to mayntaine the lawes of the land and liberties of the subject, according to the ordynance of Parliament, and yet for a long tyme they could suffer Sir Francis Wortley and others to robb and spoyle without interruption; after this answer wee presently marched to Wyrkesworthe, drove Wortley and that crew out of the county, and then went straight to Derby; where our sudden appearing prevented the designes of our malignant countriemen, for whilst they were consulting how to raise forces to oppose us, and shareinge every man's proportion, how many to mayntaine, our being at Derby in the mydst of them crossed all; what could not be done by force, they then endeavoured to effect by treatie, desireinge the Colonell to give them meeting, but to leave his strengthe behynd, a request too symple for us to yeild unto. Sir George Gresley was now joyned with us, the onely gentleman of qualety in this county that cordyally appeared to be on our side; Wortley returned into the Peake againe, whom wee suddenly sent away, with such a fear that he troubled us no more.

"Afterwards our countrie gentlemen desired another meeting at Etwall; whyther Sir George Gresley, Leiftennant-Colonell Gell, Major Saunders, and Mr. Hallowes went; who quickly perceived that nothing would suite with the designes of the malignant, but the dissolving of our forces, wee resolved to keepe together.

"From that meeting Sir John Harpur, of Swarkeston, went to Rixham, and procured the assistance of Generall Hastings with some troopes of horse, but before their comeinge the Earle of Chesterfeild had sent for his sonne Ferdynando from Oxford, who brought with him a troupe of horse, his father mett hym at Burton, and theyre publiquely in the towne swoare that within few dayes he would have Derby, but this was nether the first, nor last tyme the Earle's oath hath been broaken. But the better to serve ourselves wee presently marched to the Earle's house, Bretby, then furnished with about one hundred and twenty souldiers, horse and foote, well provided of all necessaries; the house was too strong for our small ordynance, but our foote came desperately up to the walls, which the Earle perceiving presently fled with his sonne and al his horse; we tooke the house and should have doune no

more hurt, but only taken the armes and ammunition, if the Countess would have given the common souldiers £20. to drinke, which she refusing, part of the house was plundered, to which act the souldiers were more inclined, when they understoode that some of their fellowes taken prisoners at the first onsett had received hard usage, some of them having had the honour to be beaten by the Earle himself, whom his servants had first disarmed, and then held fast from styrring: but night comeing on, the wayes foule, and we haveing no nearer quarter then Burton, were forced to make hast away.

"Our neighbours at Nottingham were now desirous to raise some forces, which good work we were willing to advance, gave Captaine Whyte leave to goe with his dragooners to them, who at first came to us with about one hundred well armed. By this tyme Generall Hastings was seated at Ashby, which place he fortifyed, and much annoyed both the counties of Leicester and Derby, whereupon the Lord Grey sent to us to joyne with him against Ashby, at the same tyme Sir William Bruerton came from London with some few horse, and we altogether went against Ashby. Our regiment was appoynted to fall upon the towne, we beate the enemy out of the workes, tooke the towne and forced them to retyre into the mannor house and church; but presently after the Lord Grey, our commander in cheife, had false intelligence of the comeing of Prince Rupert, which he too easily believed, and called us off, and so saved Hastings and the house, which otherwise had been yielded to us. So apprehensive was his Lordship of Prince Rupert's comeing, that he went straight to Leicester, where Sir William Bruerton and he stayed upon theyre owne occasions untill they lost us and the towne £500. which was but a small loss in respect of what damage Hastings hath since done us; who hath ever been a thorn in our sydes. Upon Christmas-day, presently after, we sent more of our forces to Nottingham for a designe against Newarke; but false intelligence defeated that designe also; for those that should have joyned with us, beleived the enemies forces to be farre greater then in trueth they were; and so held back theyre assistance; yet our men continued at Nottingham, sett out theyre workes, and stayed there untyll those workes were advanced. Whylst part of our forces weare thus imployed att Nottingham, Hastings with Sir John Harpur came to Swarkeston, Sir John's horse and I beganne to fortifie there; but we easily perceived how dangerous it was to suffer such neighbours so neare us; we went presently against them, they quitt the house at our fyrst comeinge, but kept the bridge for a tyme; which in regard of the river of Trent which runnes under it, and that we could approache it but one way, where they had made a strange bulwarke, the attempt was difficult, yet the valour of our men overcame it, and drove both the commanders and souldiers out of our countrey; and from thence Captaine Munday with his company went into Yorkshire, at the intreaty of Sheafeild men, where he stayed untill he had effected what they desired.

"The Morelanders in Staffordshyre next desired our ayde against Stafford, and they promised more forces to joyne with us, then was in theire power to performe. We sent our ordynance and men to Uttoxeter, but finding our forces less than wee expected and the garryson in Stafford greater then was at fyrst reported, for theyre were new supplies come thyther from Shrewsbury, we retourned to Derby, but sent some forces to Leeke, to trayne and exercise theyre men, of which at that tyme they stoode in great neede. Not long after we placed a garryson in Burton-upon-Trent, the better to secure that towne, and a greate parte of our country. We were agane commanded to joyne with others against Newarke, under the command of Major Ballard, whyther we sent our forces, under the command of Major Mollanus; which did theyre parts, for we beate the enemie out of theyre workes, and placed our coulors upon them; and when there was no other expectation but of rakeing the towne, instead of being seconded we were called off, for some secret reason, which our commanders could never yet truely understand. Whylest parte of our forces were thus engaged at Newarke, Captaine Fox came post from Lichefield, and brought the sadd news of the noble Lord Brooke's death, whereupon our Colonell went immediatelie with the Captaine to Lichfield, and kept together those forces ready to disband; he continued the seige, tooke the close, with the Earle of Chesterfeild and dyverse other prysoners. They after joyned with Sir William Bruerton who brought some horse and went against Stafford, but the enemie being farre stronger then was expected, the Earle of Northampton with above one thousand horse came out of Stafford, and fell upon our men on a heath within two myles of Stafford; at the very first encounter all our horse fled, except about two hundred and forty of the Lord Brooke's reformader troupe, who behaved themselves all very gallantly. Our Collonell quitt his horse, and went to the foote, being then in great feare and disorder, many of them readie to rune, and standing with theyre pykes advanced; the Colonell, with his owne hands, put downe theyre pykes, encouraged both them and the musquetyers, who were all disorderly, crowded together; he speedely gott them into order and gave the enemie such a vollie of shott upon theyre chardge, that they first wheeled, and much discouraged by the death of the Earle of Northampton and Captaine Middleton, with dyvers others, gentlemen and officers, they all presently fledd; at the same instant Captain Bowyer with one foote company, came very valiantly and joyned with our force; the same horse that fledd, used meanes to discourage hym in this fyght; the horse, al but the reformader troupe, and all the Captains of foote, except Captain Thomas Willoughby, left the feyld; yet we gott the victorie, brought

away the dead body of the Earle of Northampton, theyre generall, and had the pylladge of the feild. When that was donne, and noe enemie apeared of five houers after, wee went with our weary men to Chartley, where those that left us in the fyght returned to us againe.

"By our garison and friends about Chesterfeild, we were often pressed to come against the Lord Deincourt; to satisfie theyre reasonable request, the Leieutennant-Colonell, Major Mollanus, and Captain Saunders, were sent thyther with two peeces of ordynance; that Lord was summoned, refused to yeild, and obstinately held out for a long tyme, yet at last he came forth and pawned both his fayth and honour to performe certaine easie conditions, in confidence whereof, we returned to Chesterfeild, but that Lord, contrary to the articles, went early the next morning to Newarke, which perfidious dealing of his, our very adversaries have since, in some measure, revenged, for the garison at Balsover pillaged the house, and those of Newarke caused hym to unburye his money, and to bestow it in the maintenance against God and the kingdome; his lands the cavaliers have leased, because they know not how to take it, which cannot be better bestowed then towards the dischardge of publique engagements; and so then that lumpe of fleshe will bee nether for service of Kinge nor Parliament.

"Not long after the plundering, Prynce Rupert came to Lichefeild, and like a conqueror thought to take that in his way, his principal designe being for Derbie, and the suppressing of our forces, to which, besides other motives, he was ernestly importuned by many of our cheife countrymen. Whilst this Prince lay at the seige of Lychfeild we mended our workes, and called in other garisons expectinge our own turne next; when al our owne forces were together, though we weare unable to releive, yet wee pytied the condition of these brave men beseiged at Lichfeild, we often importuned the Lord Grey to joyne with us for theyre releife, which if his Lordship had donne we had eyther releived the place or dyed in the attempt. This Prince after a long seige, and with loss of many men, tooke the close at Lichfeild, but, instead of comeing on to Derbie, he returned back to Oxford; but left a garison at Burton, which the Lord Grey and wee tooke presently after, and there wee placed Captaine Sanders with his company.

"Whilst these things were in actinge, the Earle of Newcastle grewe powerfull in the North. He came with a strong armie and besieged Rotheram, the Leifetennant was then at Chesterfeild, onely with two foote companies, and two small peeces of ordynance; and being ernestly importuned by Sheaffeild men, and others, to joyne with them and some promised forces from the Lord Fayrfax, he went with a purpose to have joyned with them, and endeavour the raiseing of that seige; but, as he was upon his marche, a couple of our owne souldyers, that had been in Rotheram, dureing the seidge, and found meanes to escape, by takeing up armes for the enemie, came and told him the towne was taken, Sheaffeild castle quitt, most of the honest men fledd, and not any hope of help from the Lord Fayrefax. The Leifetennant-Collonell, with those two companies and ordynance, returned to Derbie, which the enymie might easily have cut off, if he had knowne in what condition we were. Newcastle's army was now victorious, he came on into our country, miserably plunders, and takes all before hym, leavies greate summies of money, and raiseth more men by the commission of aray; we were again threatened, and expected daylie to be besieged, and, to speak ingenuously, we never were in more danger then at that instant, therefore we called in our garison to assist us; but Captaine Saunders, who had one hundred and eighty of our foote, well armed, and some horse, raised in our county, and intended principally for this countries service, under our regiment, he refused in this our extremity to come unto us, yet he sent us his coulors and commission, but kept our men, armes, and horses; all which he turned over to Colonell Houghton; and was for that good service made his liefetennant-colonell. It pleased God to preserve us, and the Northern Popish army, in the height of theire pryde, were suddenly called back by the Lord Fayrefax, his judicious and valiant takeing of Wakefeild. The generall randevouse, now at Nottingham, now ..... whyther we were commanded, and stayed there with our forces seven weekes, dureing which tyme Warton house was beseiged, and our men put upon the service well beate the enemie out of theyre workes, and were likely to take the house in a short tyme, when, upon a rumor of the Queene's forces comeing towards Newarke, we were suddenly commanded of. Once, afterwards, the Queene's army faced Nottingham, and had the other commanders beene as forward to fight as ours, wee had then put it to the fortune of a battell; but it was otherwise resolved, and our horse went presently after to Leicester, with the Lord Grey and Colonell Cromwell, upon pretence to fetch Colonell Pargrave's regyment of foote; but neyther those foote, nor our horse, came any more to Nottingham. The Leifetenant-Collonell, Captaine Swetnam, and Captaine Mellaar, with those forces left at Derbie, beseiged and took Sir Richard Fleetwood and his house* in Staffordshire, being one of the strongest places in that county, exceeding well provided of all necessaries, and manned with such a company of obstinate papists, and resolute theeves, as the like were hardly to be found in the whole kingdome. In the absence of our horse from Nottingham, the Queene passeth by to Ashby, her army assaults, takes, and plunders Burton, carries away the commanders and souldyers

* Probably Wootton lodge.

prisoners, yet since we redeemed Leifetennant-Colonell Sanders, being confident of his promise to serve faithfully hereafter in this countrie, wee consented that he should bee major of that regiment of horse, for raising whereof his excellency hath lately granted a commission to Sir John Gell, as collonell.

"During the Queene's stay at Ashby, Hastings laboured exceedingly to have theyre forces come against Derby, but all in vaine, for our regiment was now returned from Nottingham; and wee were but weake before, fortunately supplied with twenty barrells of pouder, three hundred muskets, sixty carbines, and sixty case of pystolls, being the free gyft of the honourable House of Commons, and which wee shall ever gratefully acknowledge, and without which we had been in more danger; for, though we writt to Nottingham for some foote, they haveing then about two thousand theire, and theyre danger past with the Queene, yet would they not afford us any, which was the principall cause of the loss of Burton. For, had wee been able, as wee desired to have sent some foote thyther, that towne had been saved. Presently after the Queene left Ashby, wee beseiged Tutbury castle, and in it Hastings, with many of his best commanders; and when they were brought to great extremety, not able to hold out much longer, Major Freton would needes be gone with Nottingham horse, and so caused us to raise our seige when that castle could not have held out two daies longer. Presently after Sir John Meldrum sent to us to joyne with the Lord Willoughby and hym against Newarke; our forces went and were neare the towne. But upon intelligence of greate supplies come thither from Gainsborough, that enterprise was defeated. The garison at Nottingham presently after was removed thence, and we were againe sent for, and went to Leeke, whilst they victuled the castle, and removed such goods thyther as was thought convenient; not longe after our cominge home the enemie took Nottingham towne, and possessed themselves of it, the castle being in a manner beseiged, they sent to us for releife, many of theyre souldyers being hydd in the towne, and in danger to be left, unless we presently releived them. We sent Major Mollanus instantly, and he joyned with three troopes of horse from Leicester; with these he entered the towne, beate the enemie thence, though they were more in number then our men, killed many of the enimie, took one hundred and sixty prisoners, redeemed of souldiers, and divers other honest, one thousand four hundred. About ten daies after the committee of Nottingham sent to us againe for helpe, in regard the enimy had fortifyed at the bridge, and cut off all passage to the towne on that syde, our souldiers went againe, and after some tyme we beate the enemie from the bridge, which was of such importance that the governour of the castle professed to Major Mollanus, that unless our souldyers would stay and take the bridge he would quitt the castle, lett the Parliament doe with him what they would. When they had donne this, we went about gatherying some money for our souldiers, and being upon the borders of Yorkshire, we had intelligence of the Marquiss of Newcastle's army, by reason of the seige of Hull, and the great discouradgment of many of his party, after the victory at Hornecastle, and the takeing of Lincolne, some principall men retireing to their houses, purposely to make their peace, of which we gave notice to others, but nothing was donne saveing the loss of a fyne opportunitie to have constrained the Marquiss of Newcastle's sick army, within the wasted parts of Yorkshyre, which army was quietly permitted to retreat fyrst in Nottinghamshyre, and after to wast and destroy a greate parte of Derbyshire, to the utter doeing of many honest men, and the inricheing of many popish theeves; but before Newcastle's army came into Derbyshire, Sir Thomas Fayrfax was at Nottingham with his horse, our colonell went to hym, to bring hym to Derby, whyther Sir Thomas came, but first he had a meeting, unknown both to the colonell and committies, with some of our countrymen, at Wingfeild mannor; when Sir Thomas was comen to us, we desired hym to quarter nere Tutbury with his horse, and to beseige it with our foote; but his answer was he could not stay, and within few dayes he went into the Peake; and there had conference with other of our countrymen, and writt to Derby that two of the committes might meet hym at Chesterfeild on Saturday following, whyther the Leifetannant-Colonell and Mr. Hallowes went, and one hundred and thirty of our musquetiers mett them that night, and more were apoynted to come thyther on Monday followeing; but in the meane tyme, on Sonday in the afternoone, some of the Marquiss of Newcastle's horse appeared within two myles of the towne, and gave an alarum. Sir Thomas Fayrfax adviseth with his owne men, and resolves to be gone; the Leifetenant-Colonell and Mr. Hallowes were forced to goe of a sudden, and ride that night to quitt our garison at Wingerworth, and another att Chattsworth; shortly after we sent to Sir Thomas at Nottingham, to informe hym of the enemies strength, which was not greate, and to advise with hym what course to be taken; he promised help if we stood in neede, but in the meane tyme removed further from us, to Melton, wee sent two of the committee to hym, namely, Mr. Hallowes and Mr. Wygfall; he againe promised us help, but wished us to gett what foote wee could from Lancashire, Cheshire, and Staffordshyre; to them wee sent, and they promised a good body of foote to joyne with us, provided that Sir Thomas would come with his horse, of all which we gave hym notice, and desired his speedy help, in regard the enimie was now farr advanced in our countrye, and miserably oppressed us by plundering, and that illegall commission of array. The better to keepe the foote of our neighbouring counties together, we sent our horse to Leeke, who came thyther fortunately for that county, for, just as the enemie had routed theyre forces, our horse came into them, tooke about twenty

of the enimies, caused them to recrute and keepe them afterwards for entring Staffordshyre. Our horse stayed there about a fortnight, in which tyme wee sent severall lettres to Sir Thomas Fayrfax, ernestly desireing his ayd, wee had only promises but no assistance. In the meane tyme the enimy pillaged very neare Derby, and our neighbor countrymen, despayring of any ayd from Sir Thomas Fayrfax, returned home, and so did our horse to us.

"After they had quartered about Leeke a fortnight, wee ernestly importuned the Lord Grey for help; he gave us hope by his letters, but left us to ourselves. Wee imployed our horse the best wee could, fell upon the enemies quarters, tooke a major, and two troupes, one night; which, with some other dammadg they received from us, made them keepe afterwards a farther distance from Derby. Newcastle's army now beseiged Wyngfeild mannor, the only garison, but this towne, that was left us in the county, which, for want of releife, he tooke by composition. His lordship was often and ernestly importuned to beseige Derby, by our malicious countriemen and Hastings, who proffered all the force that possible he could make; but Newcastle was sufficiently informed of our resolution to defend itt, and could not be drawne to the enterprise by any means they could all make to hym. His business in the Northe now calls hym to Yorke; but he leaves to vex us, his owne garison at Balsover, and six collonells of his owne country, whereof five, namely, Sir John Fytsherbert, Sir John Harpur, Mr. Fretchevile, Mr. Ayre, and Mr. Milward, had such regiments as theire owne interest, backed with the commission of array, and the popeishe party, could raise for them. The sixt colonell, Sir Symon Every, haveing nether men nor armes, and wanting meanes to trouble this county, he went to Oxford to expect the success of the anteparliament there. Sir John Harpur, with his regiment, beganne to fortifie at Burton, whyther our Major Mollanus with our horse and some dragooners went, fell upon them, tooke theire major, six captaines, many other officers and common souldyers, by which act the whole regiment was spoyled. Within few dayes after Major Sanders went to South Wyngfeild with our horse, and theire tooke two captaines and some other officers and souldyers of Sir John Fitsherbert's regiment. In our greatest extremitie Captaine Clarke and Captaine Taylor most unworthely runne away from us, and at the chardge of this county, these commanders went fyrst to Nottingham, where they stayd above one weeke, and were after entertained, when they should have been punished by the Lord Grey, although wee often writ to his Lordship to have sent them to us, but in vaine. Not long before the like slippery part played, Captaine Ashenhurst, being captaine of the collonell's owne troope, whoe runne away with about forty of our horse, for which worthy service he is since become a major; but whether to the new collonell his brother, or to the wandering Collonell Chadwick, wee certainly knowe not, these two collonells being greate friends, and much together; as in reason they should, for theyre regiment consists of fewe more then that single troupe. At the importunitye since of many poore neighbors, that were miserably oppressed by a garison of Hastings his souldyers, at the king's milnes, the collonell went the last weeke and beseiged and tooke it, with the captaine and all the other officers and common souldyers, with some malignant countrymen fledd thyther for safetie. And since then Staffordshire men have beseiged Byddle house, and fearing to have the seige raised by Hastings and our countrymen, desired to lie with our horse in the confines of theyre county, which wee did, and sent our horse and dragooners under Major Saunders to Ashbourne. Our countrymen from Tissington and the Peake drew above three hundred horse and foote together, purposeing to fall upon our men in theire quarters; but ours being readie, mett them at the townesend, killed some, and tooke above one hundred prysoners, with as many horses and armes. Their officers all runne away cowardly, so that the greatest officer wee tooke was but a cornet. Besides the above-mentioned passages, it is impossible to relate our continuall and almost daylie incounters with the Earle of Newcastle's garisons at Bolesover and Welbeck, being from time to time supplied from Newarke and Yorkshyre, which trouble us on the North syde; and no less Hastings on the South, for he, being generall under the king in six countries, imployes all his witt and power principally against us. Now lett any indifferent and impartiall man judge, whether our single regiment of foote have layne idle, and wee had never more, untill of late his excellency granted our collonell another commission to raise a regiment of horse. He that shall consider that Prince Rupert, with his army, came once against us, Newcastle in person twice, and the Queene ernestly pressed, when she lay at Ashbie, the plunder of this towne, offered as a rewarde to hyr souldiers, and yet we are safe, may easylie conclude, that the hand of God were then our proper strength, and hath protected us; our cheife friends under God were the Parliament, that supplied us in our want, and his excellency the Erle of Essex, who never denied us any thing wee writt to hym for, which wee humbly and thankfully acknowledg. For good fortune that wee are not destroyed, wee give God the glory. And others have reason to thanke hym too; for let wise men consider if this towne had been lost, and our malignant lords and gentlemen in possession of this place, what had become of our neighbour counties, as also of Lankeshire and Cheshire, when in former extremeties, and in greate neede they have found no way to be supplied with ammunition and other necessaries, but what came to them by the way of this towne, and without which they could not possibly subsist.

"That the world may know, we nether undertooke the business at first with other men's money, nor have since imployed any man's estate to our owne benefit, we profess before God

and man, that when we went first to Hull to procure some souldiers to beginne withall, that we had not then any advance money, eyther from the Parliament, our owne country, or any other man or woman whatsoever; but mearly went upon our owne chardges. And that the collonell hath since sould his stock, spent his revenue, and put himselfe into debt, in mayntenance of this cause. And that he never received of any treasurer, towards al his chardges, above £240. and the leifctennant-collonell hath also disbursed and layed out in mayntenance of this cause, a greate part of his estate; and, never yet received one daies pay; so that we are out of purse many hundred pounds, spent mearely in this business. And this we proffess upon the fayth of Christians, and as wee hope for creditt and esteeme among honest men. This our profession we freelie make to take off some base and lying imputations, and not that we are weary of the cause; in mayntenance whereof wee are absolutely resolved to continue and persevere, so long as God shall lende us lives to venter, and estates to spend."

This declaration, however, seems somewhat contradicted by the following letter.

"To our loveing Friends and Neighbors, the worthy Mr. Major, the Aldermen, and other Inhabitants, of the Towne of Derby.

"Whereas, the county of Derby hath enjoyed the happiness of peace ever since the beginning of these great distractions, and have not endured the miseries and calamities which follow the best-governed armyes, so with greate blessing we retourne our most humble and hearty thanks to Almighty God. Yet we cannot but take notice of the forces lately raised by Sir John Gell, baronet, who have theyre residence within the towne of Derbie; and from thence issue into divers parts of this county, to the greate suffering of many, and to the terror and affrightment of others; as is in particular the great prejudice donne to the Earle of Chesterfield at Bretby, to the value of many thousand pounds; and since taken from Mr. Sacheverell, of Morley, £3000. in money, besides horses and other goodes; and from Mr. Gylbert, of Lockoe, to the value of £200.; and from many of us, and our neighbours' horses comeing to the markett, which caused divers to throw off theyre sacks of corne upon the way, and returne home; so that we dare not come to your markett to sell our commodities, nor can we assure ourselves of safetie at home; wherefore, out of our neighborlie affection, we have sent these letters unto you, to lett you know our resolutions, which are to retourne our most humble thanks to his gracious and most excellent majestie, for his princely care of us, and peace of this county of Derby, in sending Colonell Hastings with forces, to protect us from the plundering and robery of those souldiers within your towne, and to preserve us from those sufferings with which we are threatened, if wee yeild not obedience to the unlawfull taxations, and greate oppressions, of Sir John Gell, whom we resolve to oppose with our uttmost power and strength, not doubting of the ready assistance of our neighbors of this county and Leicestershire, who have likewise suffered by hym; though, for the present, we are but the inhabitants of some few townes hereunder written, yet wee desire and expect your answer, what course and care you will take for the disbanding and disarmeing these men, that have been so burthensome to us, which we doubt not of, and shal be ready to joyne with you in the preservation of the generall peace of this countie.

The inhabitants of Melborne and Newton, Ticknall and Stanton, Repton and Barrowe, Swarkeston and Chellison, Thurlston and Elvaston, Wildon and Shardlowe, Aston and Weston."

Swarkeston, the 2nd. of January, 1642.

Committee of Sequestrators, appointed by Parliament, for the County of Derby, 31*st March,* 1643.

Sir John Curzon, bart.	Sir John Coke, knight	Nathaniel Hallowes, esq.
Sir John Gell, bart.	Francis Revel, esq.	James Abney, esq.

Committee appointed for raising £516. *levied upon the County of Derby, for the maintenance of Fairfax's army, from* 1*st of February to the* 1*st of December,* 1644.

Weekly assessment for Derbyshire, 10th May, 1643, £175.

Sir George Gresley, knt. and bart.	Sir Samuel Sleigh, knight	John Wigley, esq.
Sir John Curzon, knight and bart.	Ralf Clark, esq.	Robert Eare, esq.
Sir John Gell, bart.	Rowland Morewood, esq.	Thomas Sanders, esq.
Sir Edward Cook, bart.	John Monday, esq.	George Pool, esq.
Sir Edward Leich, knight	Randle Ashenhurst, esq.	Edward Charleton, esq.
Sir John Cook, knight	Henry Wigfall, esq.	

Further Documents relating to the Civil Wars.

The transactions which took place during the civil wars between the king and the parliament, having been handed down very differently by the partial pen of each party, we shall endeavour to lay the whole (chiefly consisting of original manuscripts, letters, and other curious papers of the times) which we have been able to collect upon the subject, before our readers.

To William Bateman, esq. F. A. S. of Middleton near Yolgrave, a gentleman so industriously and intelligently employed in collecting both ancient and modern documents relative to Derbyshire, we are indebted for the following interesting account of Sir Christopher Fulwood.

CHRISTOPHER Fulwood, esq. was eldest son, and heir of Sir George Fulwood, of Fulwood-Street, Holborn, London, and of Middleton by Yolgrave, in the county of Derby, knight. He was probably born in London, about 1590, and bred to the profession of the law in Grays-Inn, of which society he was appointed Autumn-Reader, 4 C. I. (1628) and Treasurer, 3 Nov. 13 C. I. (1637.) *Vid. Dugdale's Orig. Jurid.* p. 297—9.

Upon the death of his father, in 1624, and when unemployed in his professional duties, he resided at Middleton, where he first appears in that year.

Upon the breaking out of the civil war he adhered to the interest of the king with considerable zeal; for when Charles the First endeavoured to raise a life-guard at York for his own person, Mr. Fulwood was employed, though not ostensibly, to engage the Derbyshire miners for this particular service, in which he appears to have been tolerably successful. The following documents, which are in themselves curious, sufficiently prove the fact: the first is an extract from a letter of acknowledgment of service, written by Charles the First to Thomas Bushell, esq. master worker of the mines-royal, from the original in the Harleian Collection in the Museum.

"CHARLES R.

"Trustie and welbeloved, wee greete you well: callinge to minde your vigilant eye of care upon all occasions, and the manie true services you have actually done us in these times of trying a subject's loyalty; as in raiseing us the Derbyshire minors for our life-guard, at our first entrance to this warr, for our defence, when the Lord Lieutenant* of that Countie refused to appear in the service, &c.

"Given under our signe manual, at our court at Oxford, the 12th day of June, 1643."

The second document is extracted from an Appeal made to the Lord Chancellor (Hyde) by Thomas Violett, as to his loyalty in the civil wars, appended to a scarce tract by Violett, entitled, "An Appeal to Cæsar, wherein gold and silver is proved to be the King's royal commodity," &c. 4to. 1660.

"Mr. Thomas Bushell can certifie his Majestie, that though he had the name of raising the Derbishire miners: I engaged Mr. Fulwood of the Peak, at my request and charge, to be chiefly instrumental to get the miners to meet his majestie at Derby, and was acting with Mr. Bushell, at Tisdelmore (Tideswell-moor) in Derbishire, for the getting the miners together, and there was at one time 1100 souldiers listed at Derby, for which service, I received his Majestie's commands, both at York, Nottingham, and Derby, about the same time his Majestie set up his standard."†

A circumstance may here be noticed, of recent occurrence, but not irrelevant, I think, in connexion with the above extracts.

In 1827, a quantity of coin was discovered in the wall of an old house at Yolgrave, consisting, principally, of half-crowns, shillings, and sixpences of James the First and Charles the First, to the value of about £25. the *latest* coin, a half-crown, was of the mintage at York, in 1642. (*Vid. Ruding's Annals*, 3. 211.) Is it not, therefore, probable that this collection was secreted by some individual who enlisted with Mr. Fulwood, and lost his life in the service?

Mr. Fulwood appears as a justice of the peace about 1640, and is mentioned, with commendation for his forbearance in that capacity, by Bagshaw, in his "De Spiritualibus Pecci," 1702, 12mo. the good old "Apostle of the Peak," in his simple, unaffected style, thus relates the occasion:

* The Lord Lieutenant at this time was, I think, William Third Earl of Devon.
† The king set up his standard at Nottingham, Aug. 22nd, 1642.

"I well remember, when the lamentable wars in England began, some who gloried in being their opposers of what they counted Puritanism, hurried him (i. e. the Rev. Mr. Mellor, curate of Taddington) before the Sessions at Bakewell, and declaimed against him as a Puritan, or Roundhead; and being put to explain these—such practices as his praying in his family—being for the strict observation of the Lord's-day—and against their prophanation of it by sports and pastimes. The justice that then was president, and had the chair, whom, for honour on account of that act of his, I will name in the margin [Mr. Fulwood] though known to be a zealot in the cause of the then King, and conformity, released him, and gave his accusers a sharp reprimand." p. 17.

Mr. Fulwood did not long survive the irruption of the civil war, for the family pedigree states, that he died at Caulton, in Staffordshire, the 16th of November, 1643, aged 54; there is, however, no entry of his burial in the register there, nor does he appear to have been laid with his ancestors at Yolgrave. The plain tradition at Middleton, related by a very shrewd and intelligent old tenant, who died there a few years ago, at an advanced age, is, that Fulwood was shot when in concealment behind a rock, in the dale below the village, by a party of soldiers. I think, that when his exertions in the royal cause, and the *time* of his death (1643) are considered, aided by tradition, no question can arise, as to his having fallen a sacrifice to his loyalty. His death at Caulton might, with some reason (for want of a better) be accounted for, by supposing that he might be on his way as a prisoner, and wounded, to the Parliament garrison at Lichfield, which city had been surrendered to Sir John Gell on the 5th of March preceding.

Mr. Fulwood was twice married, and had issue by both his wives, and tradition goes on to say, that his three (quere two) surviving daughters became, eventually, so reduced in their circumstances, as to seek parochial relief in London. The family estate at Middleton, or at least by far the greatest part of it, was alienated before 1644.

The family is presumed to be extinct; a branch of it, seated in Leicestershire, ended in three daughters, coheirs, in 1736.

The family mansion at Middleton was an "embattled house," and was in some sort remaining, about a century ago, as appears by a manuscript of that time; but very soon after began to be taken down, for the sake of the materials, which were used in building a barn, and other out-buildings to a farm, now known from the site, and this appropriation of the materials, as "the Castle farm."

There are some massy fragments of the mansion yet remaining.

ORIGINAL LETTERS, ETC.

"*To the Earl of Northampton.*

"My most honoured Lord,

"I am extreamly joyed to hear you are at Henley in Arden with your forces, and beseech you to advance to Tamworth, which will be the greatest service that ever was done the king; for, with God's blessing, we shall beate them out of Lichfield, or suddenly starve them all, beeing there is noe reliefe can come to them, nor have they any provision for a day, nor horse to fetch in any, I having soe much the greater number. Their strength consists of several garrisons, which are now left very weake. I have a certainty of their number, by the confession of diverse prisoners, and confirmed by severall intercepted letters. Their number is as follows, six small troopes of horse and dragoones, three hundred foote, came with the Lord Brooke, four hundred with Gell, and some three hundred Morelanders; but parte of them armed, and noe fighters. I, God willing, will attend your Lordship, with sixteene troopes of horse and dragoones, and can, upon a night's warning, call in one thousand foote in Staffordshire, halfe of them armed, soe that, with your Lordship's forces and mine, we shall make a good body of an army. And I have canon cariages, six pound bullets, and store of small pieces, and, within six dayes, can have culvering or demy-culvering. My Lord, you know it hath ever beene my expressions and designs to waite upon you in any action, which I shall doe in this to the utmost of your command. God hath given this faire opportunity to your Lordship to make you the most glorious and happie servant to his majestie. The enemie we are to encounter full of distractions, with the loss of their lord generall, and under severall commands, and the souldiers raw and unexperienced, but rich with plundered goods. My lord, I doubt not, with God's assistance, of a most happie success, and that you will returne, laden with honour and riches, and take all this side of Warwickshire in your way, who have beene great rebells to the king, and are full of wealth, which will be the reward of your and your souldiers paines; your lordship may surveye your forces to take many armes and horses. Indeed, my lord, your presence will be of infinite advantage, and without it this countrey is in danger to bee lost; and the rebells

grow to a great body that now are not considerable; therefore let nothing divert you from this good and great worke. As soone as I know your lordship's resolution, God willing, I will suddenly waite upon you, and doubt not thus better to satisfie you then I can by letter. But I beseech you believe this, were not the designes grounded upon much reason, and great probability of happie success, I should not thus earnestly press your lordship, that am to yourselfe, my lord Compton, and your gallant family,

Your most faithfull and affectionate servant,

H. HASTINGS."

Ashby-de-la-Zouch, Wednesday, 7 o'clock.

"*To the Right Honourable my much honoured Lord and Earl of Northampton, at Henley in Arden, within eight miles of Colshill, present this* ———.

"My Lord,

"At 12 o'clocke this present Wednesday, wee received intelligence from a boy, that most of their forces, both horse and foote, with some pieces of canon, were marching towards Stafford, which made us presently draw all our forces to Tamworth; where we shall expect by this night's intelligence a certain place of rendezvous, when we shall joyne with your lordship's forces, and so constantly march in one body. What intelligence wee shall receive this night your lordship shall have present notice of, and desire to have the like. My colonell staies at Ashby this night, expecting some assistance from Newarke, there being the last night three of their principall gentlemen sent to him, with full assurance (in my hearing) that they would march, when he pleased, into those parts of Leicestershire, or where he would appoint. These forces are all horse, which they may well spare, and doe his business for Leicestershire. Whereby hee may the better be spared from those parts to attend your lordship. Yesterday wee received intelligence that eight cornetts of horse were advancing from Derby to Leicester. And this day it is confirmed that they are returned backe, and the lord Gray is gone with a small partie for Northampton. I doe expect my colonell here by eight in the morning, and if your lordship shall appoint an earlier hower at the rendezvouse I shall move with these forces towards you. I now speake with your lordship's messenger, and I perceive by him that you doe not know of our being here; but wee shall have a care of the business this night. And if their cartes (as is reported) stand laden in Lichfield streets, it is likelier they will hasten for Burton, rather than hither. Thus, having no more at present, I kiss your lordship's handes, being

Your lordship's humble servant,

B. SCUDAMORE.

Tamworth, 8 in the night.

I humbly desire that my service may be presented to colonell Wentworth, and Sir Thomas Byron."

"*Saturday, March* 4, 1643.

"Saturday, the House of Commons being met, it was informed by letters, that the lord Brooke was killed (whose death is much lamented). The business is informed to be after this manner: viz. the lord Brooke having taken Stratford upon Avon, and settled that town and county of Warwick in peace, marched with his forces against the earl of Chesterfield and Mr. Hastings, which were with some considerable forces at Lichfield (about fifteen miles from Stratford); and having taken the town, and forced the enemy into the minster for safety, and there profering a parley, the lord Brooke went up into an upper room (after he had full possession of the town, and placed guards and sentinels, and was giving charge to his soldiers not to plunder or injure the town); and being espied looking out of a window by one of the earl of Chesterfield's souldiers, being a papist, and in the minster, shot the lord Brooke through the eye with a brace of bullets, whereupon he immediately died. The party that did it is said to be apprehended, and no doubt those which were commanders under that noble lord will revenge this treacherous act upon the cavaliers before they get out of the minster. It is reported that none of the lord Brooke's men were lost in this service, and the Parliament are making choice of another fit person to be commander in chief over those forces."

"*Friday, March* 10.

"By letters out of Warwickshire it is signified, that Sir Edward Peto, who is made commander in chiefe of those forces which went forth under the command of that renowned lord, the lord Brooke, hath taken the minster at Lichfield, and all the cavaliers, with the earle of Chesterfield himselfe, prisoners; but, as for Mr. Hastings, it is reported he was not there."

"*Monday, March* 15.

"In the last week's intelligence, mention was made that the Parliament's souldiers at Lichfield had taken the minster, giving the cavaliers quarter for their lives, and tooke the earle of Chesterfield prisoner; since which time it is further signified by letters, that not long after the taking of these, together with all their horses, armes, and ammunition, plate, and money, which they had gotten into the minster, the earle of Northampton and Mr. Hastings came with forces, intending to besiege the town; but the said earl was quickly forced to fly away, with the losse of about sixty horse; but to fly is not to escape, it is many times to increase the danger."

To the fair hands of my ever honoured lady Dyer, at the White Unicorne in the Old Bailey.

"Madam,

"My last lettre (dated February 25) and your ladyship's precious answer, are part of the plunder, which I have every day more and more, but can meete no day to revenge it in. Since I came from home, four men and five horses I have lost; thrice have I beene actually taken, besides other close pursuits, but yet I live to service your ladyship next to God and my king. And hitherto I can number as many escapes as dangers. We have had the honour in these parts to bring my lord Brooke into a quiet condition. That enemie to our church (March 2) was slaine in his quarrell against our church, by the God of our church, with a shott out of the cathedrall, by a bullet made of church lead, through the mouth, which reviled our church. And (if this be worth your reading) this cathedral being dedicated in the memory of an old Saxon holy man (called Ceadda, comonly Chadd, the blow of death came from St. Chad's church, upon St. Chad's day. This being a veritie is fitt for a lady of rare worth. His lieutenant (thought to be sir Edward Peto) and his lieutenant major, both slaine. Severall loads of hurt men, and dead men, carried away to be privately buried. After all this, the place poorely and basely yielded up. But we have more blood ready to purchase it withall. Your noble friend and I made out our several summons into Cheshire, Leicestershire, Oxfordshire, and Staffordshire. And the numbers (I hope) are growing on to a full service. I was twice prisoner in halfe an hower; but I am still a free man. Bonds cannot hold mee; only your noble favours have power to bind mee in a perpetuall service, where I am happie to bee the thrall of your kindness, in being the admirer of your virtue.

"James Audeley (or Edward Deering.)"

March 11, 1643.

Clarendon says, "The death of lord Brooke put a stop to the plott at present, till the rebells rallied again, under the command of collonel Gell, and took possession of the close."

By this prize the spirits of the rebels were much elated, and the king's party as much cast down. Those gentlemen who had declared so warmly for the king, while they thought the close a sufficient security, proceeded now for safety to the town of Stafford, where they found a strong garrison, against which sir John Gell soon led his late-flushed troops. But the earl of Northampton (who intended the relief of Lichfield, if they had waited with patience) with a strong party of horse, came seasonably to their succour. Upon this sir John Gell retired so far as to meet with sir William Bruerton, who was then coming to join him and to subdue Stafford. Their forces being thus united, they moved back towards Stafford, in hopes the earl of Northampton would meet them without the wall. It was on a Sunday in the afternoon, about the middle of March, when the earl, hearing of the rebels return, marched out to meet them with only about one thousand men, and found the enemy, unexpectedly increased in number, waiting upon Hopton heath, about three miles north-east of Stafford. Though the number of the rebels was more than double, yet the heath seeming very fair, being more than musket-shot wide from inclosure on each side, and the number of horse nearly equal, the earl resolved to give them battle; which he did with so much valour as totally to disperse and rout them, so that the enemy had scarce a horse left upon the field. But in the second charge, the earl's horse being slain under him, he was unhappily surrounded by his enemies. Notwithstanding this catastrophe, his behaviour was afterwards so courageous, that he slew the colonel of foot who first attacked him; but at length, refusing all quarter, he fell most gallantly amongst them.

After this, sir Thomas Byron, who commanded the Prince of Wales's regiment, attacked the foot with much skill and bravery. But the approach of night, and the discovery of many coal-pits, which were dangerous to the horse, obliged them to defer the action until morning. In the night, however, the enemy chose to decamp, so that the victorious party had nothing to do at break of day but to retire, when they had taken the spoil and buried the dead, much fatigued and harassed, for refreshment, to Stafford.

The following are very different Accounts of this Battle.

"*Saturday, March* 25.

"There hath been a more certain information given of the battell near Stafford than was certified the last day, which is to this effect: 'That sir John Gell, advancing towards that town with his forces, from Lichfield, the earl of Northampton with his forces fell upon their arreare, within four miles of Stafford; and, after some combate betwixt the Parliament's forces and them, there was about one thousand more of the king's forces came in to their assistance, which caused a very hot skirmish for some time, after which sir William Brewerton came in with one thousand five hundred horse, by which means the king's forces were put to the worst, the earl of Northampton slain, and one of his sonnes wounded and taken prisoner, with many others of good quality, after which they were forced to retreat into the town of Stafford for safety; but it is further informed, that before the coming of the Cheshire forces, the king's forces took four drakes, and about forty prisoners from the Parliament's forces, and it is said Mr. Hastings is mortally wounded, and that the cavaliers have desired the earl of Northampton's body, to bury it; but an answer was returned, that if they would restore the four drakes, and the forty prisoners they had taken, they should have him."

In the preceding paper it was said that sir John Gell was hurt, but not mortally wounded. Perhaps this was the wound in his neck which his doublet, now at Mr. Gell's at Hopton, in the county of Derby, exhibits, and the surgeon's bill for the cure of it (£10.) A similar doublet is to be seen at Caldwall, and a curious sword, both worn by one of Sir John Gell's officers, Captayne Saunders, then of that place.

"*Relation of the Battle of Hopton heath, near Stafford, March* 19, 1642, *wherein the Earl of Northampton, and divers other eminent Commanders, were slain.*

"Upon the 19th day of March, being the Sabbath-day, I marched from Newcastle to Stone, and soe to Sand, and joyned with sir John Gell's forces neare unto Salt heath, about two of the clocke in the afternoon. Our forces were much disproportionable to the enemies, who did very far exceed us in horse; whereof there were two regiments brought downe by the earle of Northampton. One was his own regiment, the other was the prince his regiment. There was joyned thereunto the forces of collonell Hastings, who is very strong in horse. And the Shropshire horse and dragoons, which was a greate addition to their strength. These came on with great resolution and boldnes, and in very good order. Some say there were six score, others judge there were two hundred in front, when they came up and charged our horse. Some report there were two thousand five hundred horse of theirs; whereas we had not four hundred horse at the most, whereof I brought two troopes. And I believe there were about five companies of dragoons; whereof I brought three; some of which did extraordinary good service. There were near one hundred of the dragoons slaine in the place where the dragoons skirmished; and I cannot discerne that we lost more than two or three. And yet they fought so long, and so fiercely, untill all their powder and bullet was spent. Afterwards they joyned, and fell to it pell mell, one upon another, with the stocks of their musketts. These were captaine Bromhall's men, who behaved themselves well at Brainford, and also at Middlewich, upon Monday, March 13. This was a great disadvantage unto us, that both our horse and foote were unhappily disposed of and divided into small bodyes, at such time as the enemie charged us, which was the occasion that the greatest parte of our horse were disordered, and routed, and yet very few of them slaine.

I doe not believe that all our foot there present could make five hundred men; against which the enemies horse were encouraged to make a most desperate attempt, which did produce and occasion their own destruction. Herein the wisdom and goodness of Divine Providence is to be taken notice of, and acknowledged, that the disordering and dispersing the greatest part of our horse should encourage them, with their horse, to charge furiously upon our foote, who by the discharge of their first volly of shott did performe mighty greate execution. The Earle of Northampton was then dismounted, and after slaine; but I cannot perceive that hee was knowne before hee was dead, pillaged, and stripped, when, though it was in the night, I viewed his body, lyeing naked upon the ground, and did believe him to be the generall, the Earl of Northampton; of whom I cannot perceive there was any more care and respect, either of his person, when hee was wounded, and before hee was dead, or of his body, when hee lay upon the field, than of the meanest souldier in either army. But, notwithstanding, our foote, through God's blessing, were soe successful (many of them being inexpert, having never formerly been upon service) did mightie execution upon the enemie, who were thereby rather enraged than discouraged from makeing a second as desperate an assault, which was equally (if not more) fatall unto them, who, as wee have been informed, out of some letters and acknowledgments of some of their parte, confess that they lost neere three score of their most prime and eminent commanders; amongst which there was the

major of the Prince his regiment, who is exceedingly lamented amongst them. It is reported also amongst them, that Capt. Middleton, Capt. Baker, Capt. Leeming, Capt. Cressitt, Capt. Bagott, Capt. Biddulph, of Biddulph, a recusant in Staffordshire, are all slaine. And Mr. Spencer Lucie, Sir Thomas Lucie's sonne and heire, who carried the king's or the prince's colours, which were also taken and himself slaine; soe were the colours of the Duke of Yorke taken, and his cornett slaine; Colonel Stanhope himselfe wounded, and his cornett slaine, and colours taken; soe were divers other colours upon the enemies parte; but not any officer or commander, who I can heare of, slaine upon our parte. Some of the inhabitants of the countrey report, there were neere six hundred dead bodies carried away from the field the next morning, whereof, I am confident, there were not thirtie of our men. I cannot perceive that there are six wanting of my two troopes of horse, and three companies of dragooners. In the success of this battle the Lord was pleased much to shewe himselfe to bee the Lord of Hosts and God of Victory; for, when the day was theirs and the field wonne, he was pleased mightily to interpose for the rescue and deliverance of these that trusted in him. And, as my lord generall said concerning Keinton battle, soe may it bee said of this, that there was much of God and nothing of man, that did contribute to this victorie. To him I desire the sole glory may be ascribed, and that this may be a further encouragement to trust in him, and an engagement to adhere unto this cause, as well in the midst of daungers and streights as when they are more remote. To this end I beseech you assist with your prayers those who often stand in neede thereof: and beleive that there is none that doth more earnestly pray for and desire the encrease of all comfort and happines then

Your most faithfull frend,
WM. BRERETON."

"*Letters sent to the Earle of Northampton, and found in his Pocket when hee was slaine upon Hopton Heath, March* 19, 1642.

"May it please your lordship,

"I received your letter dated at 2 of the clocke this morning, and accordingly shall follow your directions, and lodge my troopes, both nearer you and Tamworth. I have just now despatched a gentleman of my Lord Chaworth to Newark, for six troopes of horse, and one hundred musketts, of which I shall have answer to-morrow morning. Here is with mee the sheriffe of Rutland, and one of the commissioners for Lincolnshire, who I shall stay till I have an answer from Newark. There came last night to mee five troopers under the command of the Lord Gray. I have expected them a fortnight, and looke for more to come. The intelligence they give mee agrees with others in this, that there six troopes of horse and dragoons were not above two hundred and forty. And there was expected to them from Nottingham two troopes more, which are all to goe to Lichfield, on a designe upon this place. They are now at Burton, and by this dayes moveing I shall discover their intentione, having sent out a partie of fifty horse to Lichfield heath, and some spies into both townes. The Lord Gray went yesterday to Northampton, with forty horse, and left Lichfield but with two hundred foote. I am certainly assured there is not four hundred foote in Lichfielde, nor one hundred and fifty horse; but from thence I shall know more to-morrow morning, and shall send to you from time to time what I heare.

"Your most humble servant,
"H. HASTINGS.

"Ashby, the 15th, Wednesday, 10 o'clocke.

"To the Right Honourable my very good Lord the Earl of Northampton, at Colsill, these present."

"May it please your Excellencie,

"In my last I gave your excellence an account of the taking of Stafford, by a very small force, wherein the Lord was pleased to worke, and bringe to passe that which was as much beyond our power as above our hopes and expectations, to whom I desire the whole glory and honour may be attributed. Since that time wee have done our utmost endeavours to fortifie the towne, and to make good the breaches. Upon Thursday wee went to the castle, faced it, and demanded the same. The ould lady Stafford had betaken herself to the castle, removed her family, and some say all her goods. Wee made as large our forces to induce my ladye to admitte some of our men to secure the castle, and gave her assurance of all protection (wee were able to give) for her person, goods, servants, and tennants. Wee acquainted her with the miseries which would inevitably fall upon her house and estate, and did most earnestly beseech her to bee so just to herself, and to those that were to succeed her, as not to be persuaded by wicked and obstinate councell, and to bringe unavoidable destruction upon herselfe, and to doe great injury to those that should succeed.

"Wee spent much time in this treatie, but it was vain and fruitlesse; wee conceave her heart was hardened by the pernicious councell of some preists, jesuites, or other incendiaries about her, who delight in nothinge but fire and sworde. And, seeing nothinge is more ap-

parent than that they thirst after blood, I doubte not but the righteous Lord will measure out unto them, a bloody potion to drinke, and will establish peace and quietnesse untoe his own people in due time.

"These faire propositions beeing rejected, the forces returned, and, before I came to the towne I saw some of the poore out houses sett on fyer, to trye whether these would worke their spirites to any relentinge, but all in vaine, for from the castle they shotte some of our men and horses, which did much enrage and provoke the rest to a fierce revenge, and to practise those extremities, which consumed, before the next ordinance, almost all the dwellinge houses, and out houses, to the ground.

"Since that time wee heare, there are divers considerable persons in this blocked up castle, which wee resolve to observe and attend as much as possible, untill wee can recover the same, and disperse them."

1646. The following order was sent for disgarrisoning the town.*

"An order of the Commons assembled in Parliament, for the dismantling of the garrisons of Derby and Wingfield mannor, giving power to the Committee for the Affairs of Ireland, both of horse and foot. And the honourable Committee doe declare, that all such officers as will undertake this employment shall have a moneth's pay before hand, and all other souldiers that are willing to goe shall have their quarters discharged till they be transported with other good encouragements. Published according to order of Parliament. London: Printed for J. P. in the Old Bailie, 1646.

"An order of the Commons assembled in Parliament.

"The House of Commons have referred the considerations of dismantling Derby, and the imploying of our forces, horse and foot, in the service of Ireland, unto the Committy for the affairs of Ireland, to the intent that the kinge's adjacent garrisons being now reduced, our countrey may be eased of unnecessary charges, and the souldiers imployed where there is use of them, hereupon the Committy for the Affairs of Ireland, have thought it fit, that so many both of the horse and foot as are willing, shall be entertained into that service, the rest disbanded, and the garrisons of Derby and Wingfield mannor slighted, and that they further declare, that all such officers as will undertake this employment, shall have a moneth's pay advanced unto them, and the souldiers their quarters discharged untill they be transported with other good incouragements, as you will perceive by a letter, which together with this you shall receive from themselves, and at our recommendations they have appointed Colonell Samuel Roper to command the horse, as colonell of a regiment, a person of great worth, and well known in Derbyshire, as being our countryman, and having an estate amongst us, besides his interest in Ireland, of whose respects and carefulnesse on their behalfe's, the souldiers may well assure themselves an advantage, wherein we suppose, they will have cause to take no small contentment. Captain Ireland is to command the foot as colonell, who being so well known to you all and the countrey, we need not use many words concerning him, wishing you that you will give the like testimony of him that we have done. For the by-gone arrears, due both to the horse and foot, they will expect reasonable satisfaction from you, wherein we pray you to take the best course you can with all speed; chiefly they that list themselves for Ireland, must be considered as deserving particular incouragements, and that it may be known who are willing to serve the Parliament against those bloudy rebells, whose hatred to our religion and nation hath engaged them in these detestable attempts: we intreat you to communicate unto them what is intended in such manner as you shall think most convenient; and you may assure them that we shall not be wanting in our endeavours, wherein they may be concerned: Here the perticular transaction wee must refer to your wisdoms, desiring you to shew all such respects to Colonell Roper, when he shall come unto you, as belongs to a gentleman of his worth in a service of this nature. And that you would inform us of your proceedings, that wee may contribute all wee can to so necessary a work, and we remayne,

"Your assured friends and servants."

"Westminster, 23rd June, 1646."

A List of the Names of all such Persons as were in Commission for Justices of the Peace, for the County of Derby, as they stood in Michaelmas Term, 1650, from a MS. of J. Reynolds, jun. 8 Sep. 1773, now penes the late Adam Wolley, esq.

William Lenthall, Speaker
Oliver Cromwell, Lord General
John Bradshaw, Lord President
Bulstrode Whitlock, Richard Keeble, John Lisle } Commissioners of the Great Seal

* The King's Tracts, in the British Museum.

Philip Earl of Pembroke
Thomas Lord Fairfax
Henry Rolle, C. J. upper Bench
Oliver St. John, C. J. Common Pleas
Philip Jermyn, J. of upper Bench
Edward Prideaux, Attorney General
John Puliston, Jus. of C. P.

N. B. The six first, and the ninth were in Commission for every County in England and Wales; the tenth and twelfth for every County in England; and those that follow for Derbyshire only.

Nicholas Leake
Sir Francis Burdett, of Foremark, bart.
Sir Edward Coke, of Longford, bart.
Sir Edward Leech, of Shipley, knight
Sir Samuel Sleigh, of Ash, knight
John Gell, of Hopton, esq.
John Mundy, of Markeaton, esq.
Nathaniel Hallows, of Muggington, esq.
Robert Wilmot, of Chaddesden, esq.
Christopher Horton, of Catton, esq.
Thomas Sanders, of Little Ireton and Caldwell, esq.
Randle Ashenhurst, of Beard Hall, esq.
Lionel Fanshawe, of Fanshawe Gate, esq.
Francis Revell, of Carlingthwaite, esq.
Anthony Morewood, of Alfreton, esq.
James Abney, of Willesley, esq.
William Wolley, of Riber, esq.
Edward Gill, of Brimington, esq.
Robert Eyre, of Highlowe, esq.
Edward Pegge, of Beauchief, esq.
Ralph Clarke, of Chesterfield, esq.

N. B. All the foregoing were of the Quorum, and the following were not.

William Bache, of Stanton, esq.
Edward Charleton, of Sandiacre, esq.
Jervas Bennet, of Snelson, esq
Edward Manlove, of Ashburne, councellor
John Wright
Nathaniel Barton
John Spateman, of Tansley and Rodenook, esq.
Samuel Taylor.

"To the Supreme Authority of this nation, the Parliament of the Commonwealth of England.

"The humble petition of divers persons, inhabitants in the County of Derby, whose names are hereunto subscribed on behalf of themselves and others;

"Sheweth,

"That the Honourable House of Commons were pleased in August, 1646, to order that the sum of £5000. should be raised by the said County for disbanding of the Derbyshire forces, which said moneys were to be repaid out of the Composition of Delinquents estates in the said County, that £3981. 10*s.* part of the said £5000. was repaid, according to the said order, to Sir John Curson and Sir John Cook, by the Treasurers at Goldsmith's Hall, and the remaining sum being £1018. 10*s.* transferred to be paid out of Dean and Chapter's lands, but afterwards, in September, 1650, it was ordered that the said £1018. 10*s.* should be paid out of Delinquents estates which shall be sold. Now because the petitioners are many of them poor men, and have been long out of their moneys, and are not able to subsist without present payment thereof, having been at great charge, and spent much money in attending to get satisfaction of the moneys remaininge due to them, and which was advanced by order, and for the service of the Parliament, and for which many of them have paid interest ever since the borrowing thereof. They humbly pray your Honours to commiserate their sad condition, that you will be pleased to give order that payment of the said sum of £1018. 10*s.* may be made unto them by some of your Treasurers for Delinquents Estates for Composition.

"And they shall ever pray, &c."*

Presented September, 1654.

Ministers in the County of Derby, anno 1654, *mentioned in an Act of Parliament, for the appointment of Commissions for* ———.

John Rowlandson, sen.
Emanuel Bourne
Joseph Swetnam
Walter Taylor
Peter Watkinson
Edmund Barton
John Barton
John Hieron
Thomas Bakewell
Thomas Shelmerdine.

In 1655, there was an Ordinance by the Parliament for the Decimation of the Cavaliers, whereby all that had borne arms for Charles the First, or declared themselves in his interest, were to pay the tenth part of their estates that were left, to support the charge of the Commonwealth, without regard to future compositions, or any articles upon which they surrendered.

* The King's Tracts, in the British Museum.

List of Gentlemen of the County of Derby, who compounded, extracted from "A Catalogue of the Lords, Knights, and Gentlemen that have Compounded for their Estates," 1655, 8vo.

	£.	s.	d.
William Bullock, Norton	40	0	0
Francis Cavendish, Debridg (Doveridge)	480	0	0
Aston Cokayne, Ashborn	356	0	0
Patrick Cock, Tibshelf, gent.	31	0	0
Thomas Cook, Melborn, esq.	2200	0	0
Wolstan Dixey, Normanton, esq. ...	1835	0	0
Rowland Eyre, Bradway, gent.	30	6	8
George Eyre, Hathersage	25	0	0
Sir Simon Every, Egginton, bart. by his son, Sir Henry	110	0	0
William Fitzherbert, of Tissington, esq. with £55. per annum settled on the Ministry	450	0	0
John Fretchvile, Stavely, esq.	575	0	0
Ann and Dorothy Fitzherbert, Recus. per John Fitzherbert, purchaser	79	6	8
Richard and George Greaves, Beeley, gents.	160	0	0
Henry Gilbert, Locko, esq.	680	0	0
Sir John Harpur, Swarkston, with £110. per annum settled	4000	0	0
Sir Henry Hunlock, Wingerworth ...	1458	0	0
Sir John Harpur, Cawk, bart.	578	18	2
Gabriel Jackson, Langley	8	8	4
John Low, Hasland, gent.	133	6	8
Edward Low, Alderwaslee, esq. with John and Arthur, his sons	221	0	0
John Milward, Snitterton, esq.	1000	0	0
Sir Thomas Milward, Eaton upon Dove	360	0	0
Henry Merry, Barton Park, esq.	1640	0	0
John Miles, Ednaston, gent.	0	10	0
William Milnes, Ednaston, gent.	39	1	8
Robert Maskew, Dunston, gent.	60	0	0
Richard Peacock, Ashborn, gent. ...	2742	0	0
Gervas Pole, Wakebridge, gent.	255	0	0
Sir Francis Rodes, Barlborough, with £50. per annum settled	30	0	0
John Shalcross, Shalcross	400	0	0
John Statham, Tansley, gent.	29	10	0
Francis Stevenson, Unston	8	6	8
John Wolly (qu. if not Wollaston) of Rounstone, esq.	150	0	0
Lord Chesterfield, for John Ferrers ...	400	0	0
Lady Elizabeth Cook—Thomas Cooke, esq.	75	0	0
Lord Deyncourt, for Lawrence and Thomas Leake, esqrs. with £382. per ann. settled	1994	12	7
William Fitzherbert, Recus. per William Brereton and James Blanch, purchasers	447	6	8
Edward Goodman, Mantglyn, Derby ...	46	10	8
Henry and Mary Powtrell, Recus. per Clement Powtrell, purchaser	1	3	0

10 *Januarius*, 1645.

Sir John Harpur, of *Swarkeston*, in the county of *Derby*, knight, to settle £110. *per annum*: viz. £20. *per annum* upon the Vicar of *Barrow*, £40. *per annum* upon the Vicar of *Ticknall*, and £50. *per annum* upon the Church of *Repton*; for which he is to be allowed £583. and so his fine of £4583. is reduced to £4000.

18 *Aprilis*, 1646.

John Bulloke, of *Darleigh*, in the county of *Derby*, esq. to settle £130. for ever: viz. £90. *per annum* upon *Derby*, and £40. *per annum* upon the Vicar of *Weston*; for which his whole fine of £1300. is remitted.

12 *Maii*, 1647.

William Fitzherbert, of *Tissington*, in the county of *Derby*, esq. to settle £55. *for ever* upon the Church of *Tissington*; for which he is allowed £560. *settled*.

14 *Julii*, 1647.

Timothy Pursey, of *Selston*, in the county of *Nottingham*, esq. to settle £50. *per annum*, for ever, upon the Church of *Cryeh*, in the county of *Derby*; for which he is allowed £500. and so the fine of £967. is reduced to £467.

22 *Novembris*, 1647.

Edward Earl of *Dorset*, to settle £164. *per annum*, for ever: viz. £80. *per annum* upon *St. Dunstan's* in the *West*, and £84. upon the Church of *Lullington*, in the county of *Derby*; for which he is allowed £1640. and so his fine of £2415. is reduced to £775. *settled*.

1659. "August 12th was White's Fryday, the town then making an insurrection against the then usurped powers;" an account of which is given in the following letter.

"The Copy of a Letter from an Officer under the Lord Lambert, giving an account of a rising in Derby. Of Colonel Charles White, his proclaiming Booth's Declaration. And how they were dispersed. Communicated in letters from Colonel Sanders, Colonel Mitchell, and Major Barton, to the Lord Lambert, with the last news from Chester and Liverpoole. August 26th, 1659.

A Letter from an Officer under the Lord Lambert, giving an account of a rising in Derby.

"Honoured Sir

"Since I saw you I have had little rest, for the Lord Lambert required me to wait upon him towards Cheshire; and this day being at Stafford, news was brought him of a rising in Derby; for the quelling of which he presently ordered one hundred dragoons, and about one hundred and fifty horse, to march for Derby, giving the command to Major Grove, and commanded me to goe with him. Away we marcht to Uteeter (where we are now) intending resolvedly to fall into them at Derby this night: but while we were refreshing, a messenger came with letters from Colonel Sanders, Colonel Mitchell, and Major Barton, to give an account that the business was at present ended. The beginning was this: Yesterday divers Commissioners being busie in raising and settling the Militia, about eleven o'clock Colonel Charles White, with some few came into the town, and openly proclaimed Booth's declaration, whereupon all the town rose, shut up their shops, seased upon many of the Militia horses with shouting. Captain Doughty turned on their side, and drew many of his

new men to him, and in the midst of this confusion, Colonel Sanders came in amongst them, asking them what they would have, drew them all to the Green, where they all desired him to own their quarrel, and be their leader; he refused, and had liberty to go home, and afterwards they drew into the town, and moultered away, so that this morning there was not one left to appear, the active townsmen crying *Pecavy;* and thus our journey is stopped, and we are upon returning, save one troop goes forward thither. Now for Chester, this was the last news, at seven o'clock this day to the Lord Lambert: that the enemies numbers doe something lessen. We have had eighteen troup in their teethes these three daies, but can doe little for want of our foot; but we shall quickly now, for they lay the last night at Stafford: and untill they come up, for conveniency of provision and quarters, our brigade of horse lye about Drayton. They doe make much of Liverpoole, Colonel Ireland is governor, 'tis thought some of their hot spirits begin now to coole, they will ere long be lapt closer together. I am both weary and in haste.

"I remaine, Yours to serve,
"S. S."

"Utceter, August 13th, 3 o'clock."

"*Thursday, September* 1*st*, 1659.

"Having in our last stated something touching the late insurrection in Cheshire, be pleased to take a short review of the High Sheriff and Magistrates of Derby, who having proclaimed Sir George Booth's declaration at the market-place immediately after being suppressed, was appointed forthwith to proclaim the Parliament proclamation, wherein Sir George and his adherents were declared traytors, in which it is to be noted, that they themselves were concluded guilty. Since which time there is seised the Earl of Chesterfield, Sir Henry Every, Mr. Stanhope, Mr. Grey of Risley, my Lord Stamford's son, several Aldermen, and persons of estate. The heat of the insurrection being over, divers counties begin to look pale fac'd, especially those where the Militia revolted, more particularly Captain Doughty at Derby, who meeting Colonel White, shook hands with him, and said, they were agreed; bid the people arm, and stand for the country, shewed them where the arms and powder was, appointed officers of foot, caused the bells to be wrung backwards, and endeavoured to apprehend Captain Hope; but was prevented by Colonel Mitchel, who put a stop to the further accessions of the countey. In this design, the Ministers did severally invite their parishes, onely Mr. Swetnam adhered to the Parliament, and said, they were fools. Yet Mr. Siden, minister of Langley (whom Colonel Sanders had before sent into Lancashire to dissuade their proceedings) returned so much their instrument, that he appeared before the Commissioners with his sword, and pistol cockt, declaring high words to Colonel Sanders. Colonel White, who first appeared in Nottinghamshire, and afterward put the town of Derby into combustion, is ordered to be brought up to London."*

A List of Persons who were fit and qualified to be made Knights of the Royal Oak, with the value of their Estates, Anno 1660.

DERBYSHIRE.

	£.	s.	d.		£.	s.	d.
William Fitzherbert, esq.	1000	0	0	—— Coke, of Trusley, esq.	2000	0	0
—— Horton, of Elton (Catton) esq. ...	3000	0	0	Simon Degge, esq.	600	0	0
Charles Agard, esq.	2000	0	0	—— Ferrers, of Walton, esq.	1000	0	0
Nathaniel Bate, esq.	600	0	0	Colonel William Bullocke, esq.	1000	0	0

A List of Papists who have registered their Estates and the respective value thereof, in the County of Derby, Anno 1715.

	£.	s.	d.		£.	s.	d.		£.	s.	d.
William Adams ...	52	14	6	Thomas Deakin ...	15	0	0	Sir R. Fleetwood ...	0	5	0
John Allyne	89	17	5	Henry Eyre	250	0	0	John Goodman ...	5	0	0
Margaret Brint ...	78	10	0	Thomas Eyre ...	549	4	3	Catherine Hunlock ...	652	13	11
John Bowden ...	0	6	0	Thomas Eyre ...	0	9	9	Richard Hardy ...	1	18	0
John Bill	7	0	0	Lawrence Eyre ...	50	0	0	Constance Harford ...	10	0	0
Henry Bowdon ...	37	1	7	Thomas Eyre ...	21	0	0	Thomas Howson ...	8	0	0
Robert Beaumont ...	86	14	0	Vincent Eyre	112	15	6	Ann Haigh	16	0	0
George Beveridge ...	28	0	0	Rowland Eyre ...	1115	4	10¾	Sir Windsor Hunlock	1054	9	5
Hellen Bromwell ...	2	0	0	William Fitzherbert ...	497	4	0	Robert Hunlock ...	58	17	0
Robert Clayton ...	27	10	0	Robert Freeman ...	3	16	0	Henry Kirk	21	15	0
Hugh, Lord Clifford ...	666	13	4	Rowland Fleetwood ...	29	1	0	Mary Low	200	0	0

* Weekly Post, 150.

	£.	s.	d.
Anthony Low ...	1	15	0
John Marshall ...	18	0	0
John Mole	1	0	0
Gilbert Merry ...	60	13	0
Richard Millhouse ...	4	0	0
Duke of Norfolk ...	18	0	0
John Pole	190	17	0
William Petre ...	30	10	0
Margaret Pegg ...	64	12	0
Anne Savage	20	0	0
Margaret Simpson ...	346	17	6
Thomas Stanley ...	9	0	0
George Thornhill ...	8	5	0
Gervas Torr	0	5	0
Anne Warrington ...	4	10	0
Robert Willoughby ...	22	0	0
Francis Willoughby ...	95	5	0
Total	6624	9	9¾

King George the First granted a protection to certain Recusants, dated 6th April, 1716; signed by Devonshire, Townshend, James Stanhope and others.

The following is taken from a scarce book, entituled, "Names of the Roman Catholics, Nonjurors, who refused to take the Oaths to his late Majesty, King George the First." Taken from an original manuscript of a gentleman who was principal clerk to the Accomptant General's Office, belonging to the Commissioners for the forfeited Estates of England and Wales, after the Rebellion in the year 1715.

DENBEIGH.

	£.	s.	d.
William Fitzherbert, of Norbury, Com. Derb. estate at Georgetringate, in possession of Robert Withams	89	12	0

DERBY.

	£.	s.	d.
Roland Fleetwood, of Ellaston, Co. Staff. gent.	29	1	0
Richard Milhouse, of Ashburne, yeoman	4	0	0
Thomas Deakin, of Roston, gent. ...	15	0	0
Anthony Lowe, of Tobley Hill, in psh. of Nostons, Co. Cest. M. D.	1	15	0
Ellen Bromwell, of Oldgraves, spinster ...	2	0	0
John Alleyne, of Weston, gent.	89	17	0
Thomas Stanley, of Holebeck, Co. Notts. joyner	9	0	10
Mary Lowe, of Gavesold	200	0	0
William Fitzherbert, of Norbury, esq. ...	477	4	0
Dame Catherine Hunloke, of Wingerworth, widow	652	13	11
Margaret Bent, of London, spinster, estate at Ashburne, in the possession of John West	78	10	0
Dorothy Smilter, of Hathersage			
John Marshall, of Spinkhill, surgeon ...	18	0	0
George Green, of Booths, yeoman			
Henry Bockin, of Tiddeswall, yeoman			
Richard Hardy, of Tiddeswall, yeoman	1	18	0
Thomas Furnis, of Hathersage, yeoman			
Robert Freeman, of Weston, gent. ...	3	16	0
Anne Savage, of Weston, Com. Ebor. widow	20	0	0
John Bowdon, of Beighton-fields, yeoman	0	6	0
John Pole, of Pinkhill, esq.	190	17	6
Katherine Warrington, of Pinkhill ...	4	10	0
Henry Kirk of Eaves, esq.	21	15	0
Robert Clayton alias Freeman, of Kensey in Aden, Co. War.	27	10	0
Robert Willoughby, of Cossal, Co. Notts. esq.	22	0	0
Francis Willoughby, of Aspley, esq. ...	95	5	0
John Goodman, of Madely, in Co. Salop. gent.	5	0	0
Constance Halford, in the parish of Norbury	10	0	0
John Bill, of Britchwork Park, yeoman	7	0	0
Hugh Lord Clifford	666	13	4
Henry Eyre, of Gray's-Inn, in Com. Middlesex, esq.	250	0	0
Thomas Eyre, of Eastwell, in Co. Leic.	549	4	3
Henry Bowden, of Beighton-fields, yeoman	37	1	1
Mary Simpson, of Barton Blount ...	344	17	6
William Adams, of Norbury, gent. ...	52	14	6
Thomas Eyre, of Thorp	0	9	0
Lawrence Eyre, of Bromshall, in Co. Staff. gent.	50	0	0
Thomas Howson, of Bridgeway Lane, yeoman	6	0	0
John Mole, of Roston, gent.	1	0	0
George Pigg, of Osmaston, gent.			
Thomas Eyre, of Nalsteds Hall, gent. ...	21	0	0
John Oldacre, of Roston, husbandman			
Robert Beaumont, of Barrow upon Trent, esq.	86	4	0
Jervas Bagshaw, of Tiddeswell, shopkeeper	85	5	0
John Smilter, of Hathersedge, yeoman			
George Thornhill, of Hargit Wall, yeom.			
William Peter, of Bell House, in Co. Essex, esq.	30	0	0
Anne Knight, of Aldermanshead, in Co. Ebor. spinster	16	3	0
Gilbert Merry, of Kniveton, gent. ...	60	13	0
Vincent Eyre, of Woodhouse, in parish of Dronfield, gent.	122	15	6
Margaret Pegge, of Yeldersley, widow ...	64	12	0
Sir Windsor Hunlocke, of Wingerworth	1034	8	2
Sir Richard Fleetwood	0	5	0
Robert Hunlock, of Wingerworth, esq....	58	17	0
Gervall Torr, of Wormhill, yeoman			
Rowland Eyre, of Hassop, esq.	1115	4	10½
George Beveridge, of St. Giles, in Co. Middlesex, gent. estate in Sutton, in possession of Nich. Earl of Scarsdale ...	28	0	0
Thomas Howard, Duke of Norfolk ...	18	0	0
John Alleyne, of Weston, gent.	91	1	4

FLINTSHIRE.

	£.	s.	d.
William Fitzherbert, of Norbury, Co. Derb. esq.	144	13	8
Basil Fitzherbert, of Gray's Inn, in Co. Middlesex, gent.	50	0	0

KINGSTON ON HULL.

	£.	s.	d.
John Ellecher	45	0	0
Elizabeth ——	16	10	0

LANCASTER.

William Arkwright, of Broughton
Sir Richard Arkwright was a Lancashire man.
Thomas Fazakerly, of Garston

MIDDLESEX.

	£.	s.	d.
William Herbert, called Duke of Powis	776	16	2½
William Fitzherbert, of Norbury, Com. Derby	18	0	0
Henry Eyre, esq. of Gray's Inn	120	0	0
Henry Curzon, of St. Andrew's Holborn, gent.			
Henry Eyre, esq. of Gray's Inn	281	0	0
George Errington, of ——, esq. ...	273	0	0

MONTGOMERY.

	£.	s.	d.
William Herbert, styled Duke of Powis	2710	13	1

NOTTINGHAM.

	£.	s.	d.
Robert Hunlock, of Wingerworth, Com. Derby	199	4	2

	£.	s.	d.
NORFOLK.			
Henry Eyre, of Gray's Inn, esq. ...	805	4	6½
NORTHAMPTON.			
William Herbert, Duke of Powis ...	3907	0	3
NORWICH.			
Henry Eyre, of Gray's Inn, esq.	108	0	0
OXON.			
Sir John Curzon, of Waterperry	921	15	0
Francis Curzon	300	0	0
RADNOR.			
William Herbert, Duke of Powis ...	0	13	4
SALOP.			
William Fitzherbert, esq. estate at White Ladies	167	1	0
——— Herbert, Duke of Powis ...	798	3	0½
STAFFORDSHIRE.			
William Fitzherbert, esq. of Norbury, Com. Derby	133	4	8
Basil ———, of Gray's Inn, esq. ...	100	0	0
Sir John Curzon, bart. of Waterperry, Co. Oxon.	203	10	2
Thomas Fitzherbert, of Swinnocton, esq.	813	7	2½
Robert Freeman, of Weston, in Com. Derby, gent.	25	13	0
WARWICK.			
Sir John Curzon and Dame Anne, his wife	811	3	8¾
WORCESTER.			
Henry Ferrers, of Upton Snodgebury, gent.	28	0	0
Henry Eyre, of Gray's Inn, Co. Middlesex, esq.	46	2	0
Basil Fitzherbert, of Gray's Inn, Co. Middlesex, gent.	26	0	0

Taken from a Roll of Estreat Indented, of the first payment of the two subsidies within the Hundred of Morleston and Litchurch, the 1st of King C. (1625.) *Commissioners, Sir Gilbert Kniveton, Sir Richard Harpur, and Sir Francis Coke, Knts. Penes, Mr. Jonathan Sheppard of Miln Hay, in* 1687; *in* 1829 *Penes, W. Bateman, Esq. F. A. S. of Middleton.*

	£.	s.	d.
Morley and Smale, Richard Stable alias Baker, in goods	0	4	8
Willington, Godfrey Mennell, in terris, gent.	0	2	8
Chester, Eton, and Quarne, Robert Bate, gent. in terr.	0	5	20
Criche, John Clay, gent. in terr.	0	4	16
John Ashebrooke, in bonis ...	0	3	2
Codnor and Heanor, Sir John Zouch, knt. in terr.	0	6	24
John Clarke, in terr.	0	4	16
John Thwaytes, gent. in terr. ...	0	2	8
Vincent Lowe, in terr. esq. ...	0	5	20
Reppingdon and Gresley Hundred, Commissioners, Sir William Kniveton, bart. and Sir Francis Coke, knight.			
Catton, Walter Horton, esq. in terris ...	0	10	10
Foremark, Sir Thomas Burdett, bart. in terr.	0	20	4
Gresley cum Membris, Sir George Gresley, knight and bart. in terr.	0	20	4
Smythsbye, Henry Kendale, esq. in terr. ...	0	10	10
Swarkeston, John Harpur, esq. in terr. his Majesties Ward	0	50	8
Reppingdon, Godfrey Thacker, esq. in terr.	0	10	50
——— and Coton, Thomas Taylor, in bonis	0	3	8
Ticknall and Calke, Henry Harpur, esq. in terr.	0	10	50
Walton on Trent, Christopher Nevall, in terr.	0	3	8
Willesley cum Membris, Walter Stretton, in terr.	0	30	6
Wapentak of Wirkesworth, Sir Gilbert Kniveton, Sir Richard Harpur, and Sir Francis Coke, knights, Commissioners.			
Ashborne, Hugh Wood, in goods	4	10	8
Brassington, John Buxton, the elder, in lands	0	20	3
John Buxton, the younger, in lands	0	20	4
Bontsall, Anne Hopkinson, widow, in lands	3	12	0
Henry Fferne, in lands	0	20	4
Tansley, William Statham, a noted recusant			
Dethicke and Lea, Wendesley Blackwall, esq. in lands	5	20	0
Ballydon, Roger Hurt, gent.	5	8	4
Bradbourn, George Buxton, in goods ...	3	8	8
Eaton and Alsoppe, Isabel Beresford, widow, in goods	6	3	0
John Mellor, in goods	3	8	0
Hartington, William Ensor, in lands ...	20	4	0
John Ffearne, in lands	20	4	0
Thomas Ffearne, in goods	3	8	0
William Bruerton, in goods ...	3	8	0
Hopton and Carsington, John Gell, esq. in lands	10	40	0
John Ffearne, in lands	0	40	8
Kniveton, Ofcoate, and Underwood, James Whithall, gent. in lands	3	15	0
Thomas Hurt, gent. in goods ...	3	8	0
Kirkireton, Thomas Mellor, in goods ...	3	8	0
Mapleton and Thorpe, John Mylwerrde, esq. in lands	10	40	0
Midleton and Smyrrell, Christopher Fulwood, esq. in lands	10	40	0
Robert Bateman, in goods	3	8	0
Perwiche, William Parker, gent. in goods...	4	10	8
Tyssington, Sir John Ferrers, knt. in lands	20	4	0
Sir John Fitzherbert, knt. in lands	10	20	0
George Ensor, in goods	4	10	8
Wirkesworthe, Robert Wigley, gent. in goods	4	10	8
Thomas Taylor, in goods	3	4	0
Wendesley and Snitterton, Richard Senyon, in lands	1	7	0

(No. 15.)

An authentic Copy of the Charter which King Charles the Second granted to the Mayor and Burgesses of the Borough of Derby, in the County of Derby.

CHARLES the Second by the grace of God of England Scotland France and Ireland King Defender of the faith and so forth TO ALL TO WHOM these present letters shall come GREETING WHEREAS our borough of Derby in our county of Derby is an antient and populous borough and from the time whereof the memory of man is not to the contrary hath been a Town incorporate and the Mayor and Burgesses of the Borough of Derby aforesaid and their Predecessors have had and held and used and enjoyed divers liberties franchises privileges immunities and pre-eminencies as well by charters of divers of our progenitors and predecessors late kings and queens of England to them heretofore made and granted and confirmed as by reason of sundry prescriptions and customs in the same borough time out of mind used AND WHEREAS we are informed that there are certain ambiguities in several charters and letters patents to them heretofore made by reason that some things therein contained were not plainly contained nor with words proper enough granted for the good rule government and benefit of the borough aforesaid according to the true meaning of the same charters or letters patents AND WHEREAS our well beloved subjects the now mayor and burgesses of the borough of Derby aforesaid have surrendered unto us their aforesaid letters patent and charters and all their liberties and privileges whatsoever which said surrender we have accepted and by these presents do accept and have most humbly besought us that all and singular the liberties privileges immunities and grants of all our progenitors and ancestors to the same mayor and burgesses and their predecessors by any name or names of incorporation made or granted WE would vouchsafe to grant a new with the addition augmentation alteration and explication of certain liberties grants privileges immunities and franchises as to us should seem more proper for the good government and common advantage of the same borough KNOW YE THEREFORE that we willing and desiring the augmentation and amendment of the borough aforesaid and also the good name state and government thereof as aforesaid that from henceforth for ever in the same borough and in the precincts thereof continually be had one certain and undoubted manner and form of and for the conservation of the peace and good rule and government of the people there and that the borough aforesaid from henceforth for ever may be and remain a borough of peace and tranquillity to the terror of the wicked and to the reward of the good and that our peace and the rest of our acts of justice there without further delay may be observed WE of our special grace certain knowledge and mere motion HAVE willed ordained constituted and granted and by these presents for ourselves our Heirs and successors DO will ordain constitute declare and grant that the said borough from henceforth may and shall be a free borough of itself and that the burgesses of the said borough (by whatsoever name they were heretofore incorporated) and their successors from henceforth for ever may and shall be by virtue of these presents one body corporate and politick in deed fact and name by the name of the mayor and burgesses of the borough of Derby in the county of Derby and them by the name of the mayor and burgesses of the borough of Derby in the county of Derby into one body corporate and politick in deed fact and name really and fully for us our Heirs and Successors WE do erect make ordain constitute confirm and declare by these presents and that by the same name they may have perpetual succession and that they by the name of the mayor and burgesses of the borough of Derby in the county of Derby may and shall be in all future times persons fit and in law capable to have acquire receive and possess lands tenements liberties privileges jurisdictions franchises and hereditaments of whatsoever kind nature or species they shall be to them and their successors in fee and perpetuity and also goods and chattels and all other things of what kind nature or species soever they shall be and also to give grant demise and assign lands tenements and hereditaments goods and chattels and all and singular other matters and things to do and execute by the name aforesaid and that by the same name of the mayor and burgesses of the borough of Derby in the county of Derby may be enabled and impowered to plead and be impleaded answer and be answered defend and be defended in whatsoever courts and places and before whatsoever judges and justices and other persons and officers of us and of our Heirs and Successors in all suits plaints pleas causes matters and demands real personal and mixed and others whatsoever as well spiritual as temporal of what kind nature or species whatsoever they be in the same manner and form as other our liege subjects of this our kingdom of England persons fit and in law capable to plead and be impleaded answer and be answered defend and be defended and to have acquire receive possess give grant and demise may be impowered and enabled AND THAT the mayor and burgesses of the borough of Derby in the county of Derby and their successors may for ever have a common seal to serve for all causes and things whatsoever by them and their successors to be done and that it shall and may be lawful for the same mayor and burgesses and their successors from time to time to break change and make new the said seal at their pleasure as to them shall seem meet AND FURTHER we will and by these presents for ourselves our heirs and successors DO grant and ordain that from henceforth there may and shall be within the borough aforesaid one of the most honest and discreet burgesses of the borough aforesaid to be chosen in manner hereafter in these presents mentioned who shall be and be called *mayor of the borough* aforesaid AND that likewise there may and shall be within the borough aforesaid from time to time *nine burgesses* of the borough aforesaid and always dwelling and residing within the borough aforesaid (besides the mayor of the borough aforesaid) to be chosen in manner hereafter in these presents mentioned who shall be and be styled *aldermen* of the borough aforesaid and that likewise from henceforth for ever there may and shall be within the borough aforesaid from time to time fourteen burgesses of the borough aforesaid and continually inhabiting and residing within the same borough to be chosen in manner hereafter in these presents mentioned who shall be and be stiled *brothers* of the borough aforesaid and that likewise from henceforth for ever there may and shall be within the borough aforesaid from time to time *fourteen other burgesses* of the borough aforesaid and continually inhabiting and dwelling within the same borough to be chosen in manner hereafter in these presents mentioned who shall be and be styled *capital burgesses* of the borough aforesaid AND we will and by these presents for ourselves our heirs and successors DO grant that the aforesaid *aldermen fourteen brothers and fourteen capital burgesses* shall be and be called the *common council* of the same borough and shall from time to time be aiding to and assisting the mayor of the same borough of Derby aforesaid for the time being in all causes and matters touching or any ways concerning the borough aforesaid AND FURTHER we will and by these presents for ourselves our heirs and successors DO grant to the aforesaid mayor and burgesses of the borough aforesaid for the time being and their successors that the mayor of the borough

aforesaid for the time being and such burgesses of the borough aforesaid for the time being who may or hereafter shall be and be called the common council of the borough aforesaid or the major part of them (of which said major part we will that the mayor of the borough aforesaid for the time being shall be one) may and shall have full power and authority to grant constitute ordain and make from time to time all such reasonable laws statutes and ordinances as to them (in their discretions as before mentioned) shall seem meet good wholesome profitable honest and requisite for the good rule and government of the burgesses artificers and inhabitants of the borough aforesaid for the time being and for declaring in what manner and order the aforesaid mayor aldermen brothers capital burgesses and artificers inhabitants burgesses and resiants of the borough aforesaid shall bemean carry and behave themselves in their offices vocations and employments within the borough aforesaid and the limits thereof and otherwise for the further good and public benefit rule and government of the same borough and the victualling thereof and for the levying money for the use and benefit of us our heirs and successors or to the necessary service of the same borough and also for the better preservation government disposition placing letting of lands tenements possessions rents reversions revenues and hereditaments to the aforesaid mayor and burgesses and their successors by these presents or otherwise given granted assigned or confirmed or to be hereafter given granted or assigned and for all accounts matters and other causes touching or in anywise concerning the borough aforesaid the state right or interest of the same And that the mayor of the borough aforesaid for the time being and such like burgesses of the borough aforesaid for the time being who may or hereafter shall be and be called the common council of the borough aforesaid or the major part of them for the time being (of which said major part the mayor of the borough aforesaid for the time being we will shall be one) so often as they shall make ordain and establish such like laws statutes and ordinances as aforesaid in form aforesaid they may have power to impose and set such reasonable pains penalties punishments by imprisonment of the body or by fines and amerciaments or any of them to and upon all delinquents against such laws statutes and ordinances or any of them as to the mayor for the time being and such burgesses of the borough aforesaid for the time being who are or hereafter shall be and be called the common council of the borough aforesaid or the major part of them (of which said major part we will that the mayor of the borough aforesaid for the time being shall be one) shall seem reasonable and requisite And the same fines and amerciaments by distress or other lawful method whatsoever for the proper use and behoof of the mayor and burgesses of the borough aforesaid and their successors without account or any other thing to us our heirs or successors therefore to be given may have power to levy and have without the hinderance of us our heirs and successors all and singular which laws statutes and ordinances so as aforesaid to be made we will for ourselves our heirs and successors shall be observed under the pains therein to be contained so that such laws statutes ordinances and imprisonments fines and amerciaments be reasonable and not repugnant nor contrary to the laws or statutes of our kingdom of England And for the better execution of these our grants in this behalf we have assigned constituted nominated and made and by these presents for us our heirs and successors DO nominate assign constitute and make our beloved *Edward Walker* Esq. to be and become the first mayor of the borough aforesaid willing that the same Edward Walker in the office of mayor of the same borough shall be and continue from the making of these presents until the feast of St. Michael the archangel next ensuing and from thence until another burgess of the borough aforesaid to the office of mayor of the borough aforesaid shall be preferred and sworn according to the ordinances hereafter in these presents expressed and declared if the same Edward Walker shall so long live an oath upon God's holy evangelists to be first taken before the recorder or common clerk of the borough aforesaid for the time being the said office of mayor well and truly to execute TO which said recorder and common clerk we do by these presents give power to administer the said oath AND ALSO we will and have nominated and by these presents for us our heirs and successors DO will and nominate our well beloved *Roger Newton* Gentleman to be second mayor of the borough aforesaid willing that the said Roger Newton the office of mayor of the same borough upon the feast of St. Michael the archangel which will be in the year of our Lord according to the computation of the Church of England 1682 or upon the day of the death of the aforesaid Edward Walker which shall first happen shall have and exercise and continue in that office until the feast of St. Michael the archangel which will be in the year of our Lord according to the computation of the Church of England 1683 and from the same feast until another burgess of the borough aforesaid shall be preferred and sworn to the office of mayor of the borough aforesaid According to the ordinances and constitutions hereafter in these presents expressed and declared if the same Roger Newton shall so long live on oath upon the holy evangelists before the last precedent mayor and recorder of the borough aforesaid for the time being the said office of mayor well and faithfully to execute being first taken To which said last precedent mayor and recorder or either of them WE for ourselves our heirs and successors by these presents give power to administer WE also assign nominate constitute and make our well beloved *John Brookhouse Robert Wandell Roger Newton Thomas Goodwin George Blackwell John Lord John Dundridge Joseph Werden* and *Solomon Roberts* to be and become the first and present aldermen of the borough aforesaid to continue in the same offices during their lives unless in the interim for ill government or ill behaviour in that behalf or for not inhabiting or residing within the borough aforesaid from that office they or any of them shall be removed We also will and by these presents DO assign and nominate the aforesaid Edward Walker from the feast of St. Michael the archangel which will be in the year of our Lord 1682 to be and become one of the aldermen of the borough aforesaid to continue in the same office during his life unless for not residing and inhabiting within the borough aforesaid or such other legal cause as aforesaid he shall be removed from that office WE have also assigned constituted nominated and made and by these presents for us our heirs and successors DO assign nominate constitute and make our well beloved *Leonard Sadd John Francis Henry Werden John Willott John Stone Benjamin Parker Godfrey Meynell Thomas Bruin William Wandell John Cheshire Francis Radford John Bourne John Harryman* and *William Hodgkinson* to be and become the first and present brethren of the borough aforesaid to continue in the same offices during their lives unless in the mean while for ill government or ill behaviour in that behalf or for not residing and inhabiting within the borough aforesaid they or any of them shall be removed from that office WE have also assigned nominated constituted and made and by these presents for ourselves our heirs and successors DO assign nominate constitute and make our well beloved *Henry Cordin George Linacre Samuel Cheshire John Scattergood Samuel Fletcher Henry Holmes John Allen Henry Noton William Yates William Francis Isaac Cheshire Thomas Watson David Cooper* and *James Bacon* to be and become the first and present capital burgesses of the borough aforesaid to continue in the same offices during their lives unless in the interim for bad government or ill behaviour in that behalf or for not inhabiting and dwelling within the borough aforesaid they or any of them shall be removed from that office which said aldermen brethren and capital burgesses before named shall take their corporal oaths before the mayor and recorder of the borough aforesaid or one of them well and truly to execute their offices TO which said mayor and recorder and one of them we give power and authority by these presents to administer the oath aforesaid AND FURTHER we will and by these presents for us our heirs and successors do grant to the aforesaid mayor and burgesses of the borough of Derby aforesaid and their successors that the aldermen and brethren of the borough aforesaid for the time being or the major part of them from time to time for ever may and shall have power and authority yearly and every year on the day of the feast of St. Michael the archangel after the feast of St. Michael next ensuing themselves or a major

part of them to assemble in the Guild-hall in the borough aforesaid commonly called the Moot-hall or in any other convenient place within the borough aforesaid according to their discretions to be appointed and assigned and there continue until they or the major part of them there then assembled shall then have elected and nominated one of the aldermen of the borough aforesaid to be mayor of the borough aforesaid for one whole year then next ensuing and that then and there they may be able and capable before they thence depart to choose and nominate one of the aldermen of the borough aforesaid for the time being who shall be mayor of the borough aforesaid for one whole year then next ensuing And that he after he shall be elected and chose as aforesaid unto the mayoralty of the borough aforesaid before he be admitted to execute that office shall take a corporal oath upon God's holy Evangelists annually upon the day of election if he shall be then present or if absent then within one month then next ensuing after the said day of election before the last precedent mayor or in his absence before the recorder and common clerk of the borough aforesaid or one of them who shall be then present in the Guild-hall of the borough aforesaid or in any other convenient place within the borough aforesaid according to their discretions to be appointed and assigned truly well and faithfully to execute that office in and by all things concerning that office TO which said precedent mayor recorder and common clerk of the borough aforesaid for the time being or any one or more of them such oath to give and administer for us our heirs and successors we give power and authority by these presents and that after such oath so taken he may be able and capable of executing the office of mayor of the borough aforesaid until the feast day of St. Michael the archangel then next ensuing and from thenceforth until one other of the said aldermen of the borough aforesaid in due manner and form shall be elected preferred and chosen to be mayor of the borough aforesaid according to the orders and constitutions of the borough aforesaid above in these presents mentioned AND FURTHER we will and by these presents for us our heirs and successors DO grant to the aforesaid mayor and burgesses of the borough of Derby aforesaid and their successors That if it shall happen that the mayor of the same borough at any time hereafter within one year after he shall be preferred and sworn as aforesaid to the office of mayor of the said borough shall die or be removed from that office That then and so often it may and shall be lawful for the aldermen of the borough aforesaid for the time being themselves or the majority of them within fourteen days then next ensuing the death or removal of the said mayor to assemble in the aforesaid Guild-hall in the borough aforesaid or in any other convenient place within the borough aforesaid and to elect nominate and choose one honest and fit man as the alderman of the borough aforesaid to be mayor of the said borough in the room of him so dying or removed from his said office And that he into the office of mayor being so elected and chosen a corporal oath in form aforesaid being first taken may have and exercise the said office for the remainder of that year and until another shall be in due manner elected and sworn into that office and so often as the like case shall happen And if after the death or resignation of any of the aforesaid aldermen any one or more of the aldermen of the said borough shall die or for the causes aforesaid be removed That then the mayor of the borough aforesaid and the rest of the aldermen then living within one month then next ensuing or the major part of them in the presence of the same mayor from time to time for ever to be assembled in the Guild-hall aforesaid or some other convenient place within the borough aforesaid according to their discretions by the mayor to be limited and appointed or the major part of them so assembled may have power and authority to elect and prefer one or more of the better and more discreet brethren of the borough aforesaid into the place or places of such alderman or aldermen of the borough aforesaid then dead or removed from his or their office to supply the aforesaid number of aldermen of the same borough and that he or they so chosen and preferred having taken a corporal oath the same office well truly and faithfully to execute before the mayor of the borough aforesaid for the time being the same office or offices to which he or they shall be so elected preferred and sworn may have and exercise during their lives unless for ill government or ill behaviour in the same or for not residing within the borough as aforesaid he or they shall be removed and so toties quoties as the case shall happen And if any one or some of the brethren of the borough aforesaid shall die or be removed from his or their office That then the mayor of the borough aforesaid and the rest of the brethren of the borough aforesaid then being within one month then next following or the majority of them in the presence of the same mayor to be assembled from time to time for ever in the Guild-hall aforesaid or in some other convenient place within the borough aforesaid according to their discretions to be limited and appointed by the mayor or a major part of them so assembled may have power and authority to elect and prefer one or more of the better and more honest capital burgesses of the borough aforesaid into the place or places of such brother or brethren of the borough aforesaid then dead or removed from his or their place or places to make up the aforesaid number of fourteen brethren of the same borough and that he or they being so elected and chosen having taken a corporal oath well truly and faithfully to execute that office before the mayor of the borough aforesaid for the time being the same office or offices whereto he or they shall be so chosen preferred and sworn may have and exercise for their lives unless for ill government or nonresidence within the borough aforesaid or other lawful causes as aforesaid they or any of them shall be removed from the aforesaid place of brethren and so often as it shall happen And if any one or more of the capital burgesses of the borough aforesaid shall be removed from that office That then the mayor of the borough aforesaid the aldermen brethren and the rest of the capital burgesses then being within one month then next ensuing or the major part of them in the presence of the same mayor to be assembled from time to time for ever in the Guild-hall aforesaid or in some other convenient place within the said borough according to their discretions to be limited and appointed by the mayor or the major part of them so assembled may have power and authority to elect and prefer one or more of the better and more discreet burgesses of the borough aforesaid inhabiting into the place or places of such capital burgess or capital burgesses of the borough aforesaid then dead or removed from that office to supply the aforesaid number of fourteen capital burgesses of the same borough and that he or they so chosen and preferred having taken a corporal oath well truly and faithfully to execute that office before the mayor of the borough aforesaid for the time being the same office or offices whereto he or they shall be so chosen or preferred and sworn may have and exercise for their lives unless for ill government or for nonresidence within the borough aforesaid or other legal causes as aforesaid he or they shall be removed and so often as the case shall thus happen to which said mayor for the time being we do by these presents for us our heirs and successors give power and authority to administer such oath to the aldermen brethren and capital burgesses in like manner from time to time hereafter to be chosen AND FURTHER we will and by these presents for us our heirs and successors DO grant to the aforesaid mayor and burgesses of the borough of Derby and to their successors that the mayor of the borough aforesaid for the time being and the aldermen brethren and capital burgesses of the borough aforesaid for the time being or the major part of them (of which said major part we will that the mayor of the borough aforesaid for the time being shall be one) shall and may from time to time have power and authority to displace or remove such burgesses of the borough aforesaid from their office or place of common council who are or in any future times hereafter shall be of the common council of the borough aforesaid for the causes aforementioned or for any other reasonable or lawful causes or to displace or remove any burgess or burgesses of the borough aforesaid from the privileges of a burgess any act statute ordinance use prescription or custom to the contrary thereof in anywise notwithstanding AND FURTHER we will and by these presents for us our heirs and successors DO

grant to the aforesaid mayor and burgesses of the borough aforesaid and their successors That they and their successors from henceforth and for ever may and shall have as they anciently had and now have within the borough aforesaid one honest and discreet man skilful in the laws of England to be chosen in manner hereafter in these presents mentioned who shall be and be styled *recorder* of the borough aforesaid And for the better execution of our will and grant in this behalf we have nominated assigned appointed and made and by these presents for us our heirs and successors do nominate assign appoint and make our well beloved *Simon Degge* Knight to be and become the present recorder of the borough aforesaid to continue in the same office for and during the term of his natural life AND FURTHER we will and by these presents for us our heirs and successors do grant to the aforesaid mayor and burgesses of the borough aforesaid and to their successors that from time to time and at all times after the death or resignation of the office of recorder by the aforesaid *Simon Degge* it may and shall be lawful for the mayor aldermen common clerk brethren and capital burgesses of the borough aforesaid for the time being or the major part of them in the presence of the same mayor in any convenient place to be assigned by the mayor to choose and prefer one other honest and discreet man instructed in the laws of England into the recordership of the borough aforesaid to continue in the same office during the pleasure of the mayor aldermen brethren and capital burgesses of the borough aforesaid for the time being or a major part of them (whereof the mayor of the borough aforesaid for the time being we will to be one) and thus so often as the case shall so happen And that he who shall be elected preferred and named into the office of recorder of the borough aforesaid at any time or times hereafter shall before he be admitted to execute that office take a corporal oath before the mayor of the borough aforesaid for the time being well truly and faithfully altogether to do and execute all and singular such things as appertain to the office of recorder of the borough aforesaid TO which said mayor for the time being we for us our heirs and successors give power and authority by these presents as to administer such oath to the recorder of the borough aforesaid for the time being and that from thenceforth he may be able and capable to have use exercise and enjoy the same office of recorder of the borough aforesaid AND FURTHER we will and by these presents of our more abundant special favour and from our certain knowledge and mere motion DO grant to the aforesaid mayor and burgesses of the borough aforesaid and to their successors that if it shall happen that the mayor of the borough aforesaid for the time being shall be so ill as not to be able to attend the necessary affairs of the borough aforesaid or to go out of the borough aforesaid for any reasonable cause alledged by the mayor and aldermen of the borough aforesaid or the major part of them (whereof we will that the mayor of the borough aforesaid for the time being be one) and that then and so often from time to time it may and shall be lawful for the mayor of the borough aforesaid for the time being to make and constitute from time to time one of the aldermen of the borough aforesaid for the time being to be and become the *deputy* of the same mayor for the time being so ill or for any reasonable cause so as aforesaid required to be absent to continue in the same office of deputy mayor of the borough aforesaid in the absence or sickness of the mayor of the borough aforesaid for the time being during the pleasure of the same mayor of the borough aforesaid for the time being which said deputy mayor of the borough aforesaid so as aforesaid deputed and constituted to be deputy mayor of the borough aforesaid for the time being may be able and capable of doing and executing all and singular such things as do appertain to the office of mayor of the said borough within the borough aforesaid and ought to appertain to be done and executed during the pleasure of the mayor of the borough aforesaid in his absence or sickness as fully freely and entirely as the mayor of the borough aforesaid for the time being had he been present might be able and capable of doing and executing and thus as often as the case shall so happen WE also will and grant that if it shall happen that the recorder of the borough aforesaid for the time being at any time be so ill as not to be able to attend the necessary affairs of the said borough or should be absent from the borough aforesaid on account of the affairs of the king or for any other reasonable cause then it may and shall be lawful for the recorder of the borough aforesaid for the time being to depute and nominate a man honest and skilful in the laws of England to be his deputy to continue in the same office during the pleasure of the recorder of the borough aforesaid for the time being PROVIDED always and we will that the said deputy mayor and deputy recorder of the borough aforesaid for the time being shall take a corporal oath before the mayor of the borough aforesaid for the time being respectively well and faithfully to execute the offices aforesaid before they enter upon the said several offices of deputy mayor and deputy recorder and thus so often as the case shall happen WE also will and by these presents for us our heirs and successors do give and grant to the mayor and burgesses of the borough aforesaid and their successors that the mayor of the borough aforesaid for the time being may and shall have full power and authority to carry in his hand a *white staff* or *white wand* so long as he continues in the office of mayor of the borough aforesaid and no longer and at the pleasure of the mayor of the borough aforesaid for the time being to bear and carry a *mace* of silver or gold engraved and adorned with a royal signet of the arms of us our heirs and successors of this our realm of England before the mayor of the borough aforesaid for the time being every where within the borough aforesaid and the liberties and precincts of the same MOREOVER we grant for us our heirs and successors to the aforesaid mayor and burgesses of the borough aforesaid and their successors that the mayor and burgesses of the borough aforesaid and their successors within the borough aforesaid and the liberties and precincts of the same from henceforth for ever may and shall have *view of frank pledge* of every inhabitant within the borough aforesaid and the liberties and precincts of the same twice a year to be held in the borough aforesaid before the common clerk of the borough aforesaid for the time being upon the same days and times as to them shall seem meet and necessary and all and whatsoever belonging to the view of frank pledge and all amerciaments fines profits and commodities to the aforesaid view of frank pledge belonging or appertaining or thereby growing and arising AND FURTHER we will and by these presents for us our heirs and successors do grant to the aforesaid mayor and burgesses of the borough aforesaid and to their successors that the mayor of the borough aforesaid and the bishop of Coventry and Lichfield and his chancellor and the recorder of the borough aforesaid who shall from time to time happen to be in these offices and also *John Bagnold* Gentleman hereafter named to be the present common clerk of the same borough during his continuance in that office and the last precedent mayor for and during one whole year next ensuing after he hath executed the office of mayor of the borough aforesaid and four others of the most ancient aldermen of the borough aforesaid for the time being and every of them may and shall in all future times be *justices* of us our heirs and successors as well to keep the peace in the same borough and the liberties and precincts thereof as to keep the statutes of vagabonds artificers and labourers weights and measures within the borough aforesaid and the liberties and precincts thereof and to correct and keep or cause them to be corrected And also to do and execute all and every such other things which belong and appertain to the office of a justice of peace And that they the said mayor bishop chancellor recorder common clerk hereafter in these presents mentioned last precedent mayor of the borough aforesaid and four other of the most ancient aldermen of the borough aforesaid for the time being or any three or more of them (whereof the mayor and recorder for the time being we will to be two) may and shall for ever have full power and authority to enquire hear and determine within the borough aforesaid and the liberties and precincts of the same as well in the presence of us our heirs and successors as in the absence of us our heirs and successors all and all manner of murders felonies misprisions riots routs oppressions extortions forestallings regratings trespasses offences

things matters and articles and all other things whatsoever within the borough aforesaid and the liberties and precincts of the same from time to time breaking forth or happening which to the office of a justice of peace any ways belong or are incumbent or which hereafter can or shall belong and be incumbent or which any ways may or ought to be enquired of heard and determined before justices of the peace together with the correction and punishment thereof and of holding *a session* to commit and discharge prisoners and also to do and execute all other things within the borough aforesaid and the liberties of the same as fully and entirely and in as ample manner and form as the justices of the peace of us our heirs and successors in the county of Derby or elsewhere within our kingdom of England by virtue of any commission act of Parliament statute law or custom or by any other lawful method whatsoever heretofore before these times had or exercised or hereafter can or may have and exercise and in as ample manner and form as if the same in these letters patents had been separately and by special words expressed contained and mentioned and this without any commission or commissions precept or other special warrant from us our heirs or successors hereafter to be had obtained or procured in that behalf the letters patent of our late most dear grand-father king James made in the ninth year of his reign &c or any other letters patent acts statutes ordinances provisions usages customs restraints or any other thing to the contrary thereof notwithstanding And that the mayor and recorder of the borough aforesaid and also the common clerk and likewise the last precedent mayor and the aforesaid four senior aldermen of the borough aforesaid for the time being and every of them shall take a corporal oath well truly and faithfully to execute the office of a justice of peace and the oaths in that behalf by the laws and statutes of this our kingdom of England PROVIDED to be required to be taken by a justice of the peace And that then the mayor of the borough aforesaid and his successors for the time being may have full power and authority to give and administer such oaths to such justices of the peace by virtue of these presents without any other warrant or commission from us our heirs and successors in any manner hereafter to be sued out or prosecuted WE also will and by these presents for us our heirs and successors do grant and command that the justices of the peace of us our heirs and successors of the county of Derby aforesaid or any of them hereafter within the borough aforesaid or the liberties of the same shall not in any wise intermeddle or have or exercise any jurisdiction of any causes things or matters whatsoever which belong or any wise appertain to a justice of the peace of the borough aforesaid by virtue of these our letters patent And that the serjeants at mace of the borough aforesaid for the time being the precepts and warrants of the same mayor recorder or justices of the peace aforesaid within the borough aforesaid for the time being and all other things shall execute from time to time as any sheriff of this our kingdom of England by the mandates of any justices of the peace in any counties of this our realm of us our heirs and successors hath any ways been accustomed to do return and execute AND FURTHER we will and by these presents for us our heirs and successors do grant to the same mayor and burgesses of the borough aforesaid and their successors and by this charter confirm to them that as anciently there hath been so hereafter there may be *one jail* in the borough aforesaid and that the mayor of the borough aforesaid may have the custody of the jail aforesaid and of all the prisoners who shall happen to be taken within the borough aforesaid or the liberties of the same for any felonies trespasses or other misdemeanors causes or things whatsoever AND FURTHER we will and by these presents for us our heirs and successors do grant to the aforesaid mayor and burgesses of the borough aforesaid that they and their successors for ever hereafter may and shall have within the borough aforesaid one honest and discrete man who shall be and be styled *common clerk* of the borough aforesaid as anciently they had and now have who shall in all future times be assisting counselling and aiding to the mayor of the borough aforesaid AND we will and by these presents for us our heirs and successors do grant that the said common clerk of the same borough for the time being may and shall be coroner and clerk of the peace of us our heirs and successors within the borough aforesaid the limits and precincts of the same and shall do and execute all and singular such things which any common clerk clerk of the peace or coroner by virtue of such offices respectively might or ought to do and execute and not otherwise being unwilling that after the date of these our letters patent any person or persons shall be chosen preferred or nominated to the office of coronor of the borough aforesaid but that the common clerk in the stead and place of such coroner from time to time shall be chosen and preferred for ever to execute all and singular such things which to the office and offices of common clerk clerk of the peace and coroner respectively appertain And that no coroners of our county of Derby shall intrude themselves into the borough aforesaid the limits and precincts of the same to do and execute any office or other things to the same appertaining And for the better execution of our will and grant in this behalf we have assigned constituted and made and by these presents for us our heirs and successors do assign nominate constitute and make our well beloved *John Bagnold* Gentleman to become and be the present common clerk and coroner of the borough aforesaid to continue in the same office during his natural life That the aforesaid John Bagnold before he be admitted to execute the office aforesaid shall take a corporal oath upon God's holy Evangelists before the mayor and recorder of the borough aforesaid for the time being or either of them or so many of the aldermen brethren and capital burgesses of the same borough who shall be willing to be present well truly and faithfully to do and execute all and singular such things which to the offices of common clerk clerk of the peace and coroner of the borough aforesaid respectively appertain to which said mayor and recorder of the borough aforesaid for the time being or to either of them we do by these presents for us our heirs and successors give power and authority to administer such oath AND FURTHER we will and by these presents for us our heirs and successors DO grant to the aforesaid mayor and burgesses of the borough aforesaid and to their successors that from time to time and at all times after the death or removal of the aforesaid John Bagnold from the office aforesaid it may and shall be lawful for the mayor recorder aldermen brethren and capital burgesses of the borough aforesaid for the time being or the major part of them (of which said major part we will that the mayor and recorder of the borough aforesaid for the time being or either of them shall be one) to choose and prefer another honest sufficient and discrete man to be common clerk of the borough aforesaid to continue in the same office during the pleasure of the mayor recorder aldermen brethren and capital burgesses of the same borough for the time being or a major part of them as aforesaid having first taken a corporal oath in manner aforesaid and thus as often as the case shall so happen AND FURTHER we will and declare our royal intention that no recorder or common clerk of the borough aforesaid from henceforth to be elected and appointed shall enter upon such office or offices or either of them respectively before he or they shall be approved of by us our heirs or successors any thing in these presents contained or any other thing cause or matter whatsoever to the contrary thereof in any wise notwithstanding AND FURTHER we will and by these presents for us our heirs and successors do give and grant to the aforesaid mayor and burgesses of the borough aforesaid and their successors or to the major part of them (of which said major part we will that the mayor of the borough aforesaid for the time being be one) full power to nominate elect and make and that from time to time from henceforth for ever they may be impowered to nominate choose and make *six constables* and *four serjeants at mace* and such and so many *chamberlains* and other inferior officers and ministers of the borough aforesaid as they have heretofore in the same borough chosen and that in their discretions shall hereafter seem convenient and upon the same days places and times as is and hath been accustomed in the same borough And the same officers or ministers or any of them from time to time henceforth for ever at the pleasure of the said mayor and bur-

gesses and their successors to displace and remove as hath heretofore in the same borough been used and accustomed and no otherwise nor in any other manner AND FURTHER we will and by these presents for us our heirs and successors do grant to the aforesaid mayor and burgesses of the borough aforesaid and to their successors that they and their successors from henceforth for ever may have and hold and may be able and capable to have and hold within the borough aforesaid one *court of record* to be held in the Guildhall of the borough aforesaid every Tuesday in every second week throughout the year as they have anciently had before the mayor recorder last precedent mayor and common clerk of the borough aforesaid for the time being or before any two or more of them (whereof we will that the mayor or common clerk of the borough aforesaid be one) And that in the same court they may hold by plaint in the same court to be levied all and all manner of such and such like pleas as well real as personal and mixed actions suits and demands whatsoever trespasses made or to be made and also of all and all manner of such and such like pleas upon the case debt account covenant deceipt detinue of charters writings and muniments and chattels taking and detaining of cattle chattels and other contracts rights or titles from whatsoever causes or things as and which at any time heretofore by any lawful charter or grant or by any lawful custom or prescription in the same borough hath been pleaded and that such like pleas plaints and actions as well real as personal and mixed shall be there heard and determined before the mayor recorder and last precedent mayor and common clerk of the borough aforesaid for the time being or two or more of them as aforesaid by such and such like process and method according to the laws and custom of our kingdom of England and as hath been consonant to our laws and in such ample manner and form as in any other court of record in any other borough or town corporate within this our kingdom of England is used and accustomed or may or ought to be done any thing in these presents or in any other letters patents to the said mayor and burgesses of the borough aforesaid or their predecessors or to the bailiffs and burgesses of the borough aforesaid or their predecessors or to the bailiffs and burgesses of the borough aforesaid heretofore made and contained to the contrary thereof in any wise notwithstanding WE also will and by these presents for us our heirs and successors do grant to the aforesaid mayor and burgesses of the borough aforesaid and their successors that the serjeants at mace of the borough aforesaid for the time being or any of them all juries pannels inquisitions attachments precepts mandates warrants judgements process and other things whatsoever necessary to be done touching the causes aforesaid within the borough aforesaid the limits and precincts of the same may do and execute as it shall be commanded them according to law and according to the custom of the borough aforesaid and as is used in the like cases or ought to be done in any court of record in any other borough or town corporate within the kingdom of England And that the mayor and burgesses of the said borough and their successors may and shall have to the use and benefit of the said borough all and all manner of issues of jurors in the court aforesaid forfeited AND FURTHER we will and by these presents for us our heirs and successors do grant to the aforesaid mayor and burgesses of the borough aforesaid and their successors that they and their successors from henceforth from time to time for ever may and shall have the *return of all writs* precepts and mandates whatsoever of us our heirs and successors and of summons of the exchequer of us our heirs and successors concerning all matters within the borough aforesaid the liberties limits and precincts of the same any ways arising and full execution of the same by their ministers and officers of the borough aforesaid may do and execute so that no sheriff or other officer of us our heirs and successors may enter or presume to enter the borough aforesaid the limits or precincts of the same to do any thing which to his office in that behalf belongs to be done unless in default of the said mayor and burgesses and their successors Wherefore we will and by these presents for us our heirs and successors do firmly charge and command the sheriff of us our heirs and successors of our county of Derby for the time being that neither he by himself or by his officers or ministers to the borough aforesaid the limits or precincts of the same to enter or any ways intrude to execute any summons distress attachment or any other offices there to exercise or execute without the office of a sheriff do pertain AND MOREOVER we will and by these presents for us our heirs and successors do give and grant to the aforesaid mayor and burgesses of the borough aforesaid and their successors all and all manner of goods and chattels of felons fugitives felons of themselves persons outlawed and put in exigent and of all others whatsoever attainted convicted or condemned goods and chattels waived and deodands within the borough aforesaid or the liberties limits or precincts of the same found or hereafter to be found or from time to time happening coming or arising And that it shall and may be lawful for the aforesaid mayor and burgesses and their successors or their ministers without the hinderance of us our heirs or successors our justices escheators sheriffs coroners or other bailiffs or ministers whatsoever of us our heirs or successors to put themselves into possession of the goods and chattels aforesaid and the same to the use of the said mayor and burgesses and their successors to have and retain for ever without account or other thing therefore to us our heirs or successors any ways whatsoever to be yielded paid or done AND FURTHER out of our more abundant special grace and from our certain knowledge and mere motion we will and by these presents for us our heirs and successors do grant to the aforesaid mayor and burgesses of the borough aforesaid and to their successors that the said mayor and recorder of the borough aforesaid for the time being may and shall have power from henceforth for ever of receiving and recording recognizances of charters and other writings whatsoever concerning any lands tenements rents hereditaments debts goods and chattels whatsoever within the same borough the limits and precincts thereof by whatsoever persons made married women excepted AND FURTHER we will and by these presents for us our heirs and successors do grant to the aforesaid mayor and burgesses of the borough aforesaid and to their successors that the mayor of the borough aforesaid for the time being and the clerk to take recognizances of debts according to the form of the statute of merchants and of the statute of Acton Burnell* by us by these presents deputed and appointed may have for ever full power and authority to take and receive whatsoever recognizances and executions thereupon to be made according to the form of the statute of Acton Burnell lately made and also all other things to do and execute which by virtue of the same statutes or either of them to any mayor or to any clerk to take recognizances of debts according to the form of the statutes aforesaid or either of them to be appointed or any of them do may or ought to belong AND that the same mayor and clerk for the time being from henceforth for ever may and shall have and by virtue of the said presents shall make assume and apply *one seal* of two pieces one part whereof shall be a greater part and the other part thereof shall be a less part to seal the recognizances aforesaid before them hereafter to be acknowledged according to the form of the statutes of merchants aforesaid which said seal shall be and be called from henceforth for ever the seal of us our heirs and successors to seal the recognizances aforesaid within the borough aforesaid to be taken the greater part of which said seal shall always remain in the custody of the mayor of the borough aforesaid for the time being and the other part of the same seal (vizt.) the lesser part thereof shall be and remain for ever in the hands of the clerk for the time being by these presents deputed and appointed or hereafter to be deputed and appointed to write and enrol recognizances aforesaid AND for the better execution of our will in this behalf

* *Acton Burnell.* "The Statute of Edward I. A. D. 1283, ordaining the *Statute Merchant*; it was so termed from a place named *Acton Burnel*, where it was made; being a castle formerly belonging to the family of *Burnel*, and afterwards of *Lovel* in *Shropshire*." *Termes de la Ley.*

from our special grace certain knowledge and mere motion we will and by these presents for us our heirs and successors do grant to the aforesaid mayor and burgesses of the borough aforesaid and to their successors And we do ordain by these presents that John Bagnold now common clerk of the borough aforesaid from henceforth during the pleasure of the mayor recorder aldermen brethren and capital burgesses of the borough aforesaid for the time being or a major part of them (whereof we will that the mayor for the time being be one) may and shall be the clerk of us our heirs and successors to take write down and enroll recognizances of debts according to the form of the statutes aforesaid and either of them within the borough aforesaid and the lesser part of the seal aforesaid to keep and to do and execute all other things which to any clerk for recognizances of debts according to the form of the statutes aforesaid or either of them appointed do pertain to be done and executed And we do by these presents make ordain and constitute the said John Bagnold the clerk of us our heirs and successors for the taking writing down and enrolling of recognizances of debts within the borough aforesaid according to the form of the statutes aforesaid or either of them and to keep the lesser part of the seal aforesaid and further to do and execute all other things which to any clerk for recognizances of debts according to the form of the statutes aforesaid and either of them appointed do appertain to be done and executed during the pleasure of the mayor recorder and aldermen brethren and capital burgesses of the borough aforesaid for the time being or of the major part of them (whereof we will that the mayor of the borough aforesaid for the time being be one) AND FURTHER we will and by these presents for us our heirs and successors do grant to the aforesaid mayor and burgesses of the borough aforesaid and to their successors and by these presents do ordain that after the decease or removal of the said John Bagnold from the office of clerk of the statutes aforesaid the common clerk commonly called the town clerk of the borough aforesaid for the time being may and shall in all future times be the clerk of us our heirs and successors to take write down and enroll recognizances of debts according to the form of the statutes aforesaid and either of them and the lesser part of the seal aforesaid to keep and further to do and execute all other things which to any clerk for recognizances of debts according to the form of the statutes aforesaid or either of them appointed do pertain to be done and executed And we do by these presents for us our heirs and successors make ordain and appoint the said common clerk of the borough aforesaid for the time being the clerk of us our heirs and successors to take write and enroll recognizances of debts according to the form of the statutes aforesaid and either of them within the borough aforesaid and the lesser piece of the seal aforesaid to keep and further to do and execute all other things which to any clerk for recognizances of debts according to the form of the statutes aforesaid and either of them appointed do appertain to be done or executed after the death or removal of the aforesaid John Bagnold And that the aforesaid John Bagnold during the pleasure of the mayor recorder aldermen brethren and capital burgesses of the borough aforesaid for the time being or of the major part of them (whereof we will that the mayor for the time being be one) and after the death or removal of the common clerk of the borough aforesaid for the time being from thenceforth for ever may and shall be clerk to take recognizances of debts according to the form of the statutes aforesaid And that the same John Bagnold during the time in which he shall continue in the office of common clerk and after his decease or removal the common clerk for the time being may and shall have power and authority to do and execute all and singular such things which to the office of a clerk for recognizances of debts according to the form of the statutes aforesaid deputed by virtue of the same statutes and either of them do anywise pertain to be done and executed And that such recognizances so as aforesaid taken and acknowledged may and shall be of as great force and effect in law as any recognizances taken and acknowledged before any other mayors and clerk or other officers of any city or other town or borough within our kingdom of England according to the form of the statutes aforesaid or either of them may and shall or ought to be or anyways can or may be AND that the aforesaid mayor of the borough aforesaid for the time being and the aforesaid John Bagnold during the time that he shall continue in the office aforesaid and after his decease or removal of the mayor of the borough aforesaid and the common clerk of the same borough for the time being and each of them all and singular other things whatsoever which by the statutes aforesaid or either of them in and about such recognizances to be done may do and perform from henceforth for ever AND FURTHER out of our special more abundant favour certain knowledge and mere motion we have given and granted and by these presents for us our heirs and successors do give and grant to the same mayor and burgesses of the borough aforesaid and to their successors that every mayor of the borough aforesaid for the time being may and shall be *escheator* and *clerk of the market* within the same borough the liberties and precincts thereof And that the said mayor after he hath taken his oath before the last precedent mayor recorder or common clerk of the borough aforesaid for the time being or any of them well and faithfully to execute the said offices of escheator and clerk of the market respectively to which said last precedent mayor recorder and common clerk for the time being or any of them we do by these presents for us our heirs and successors grant power and authority to administer such oath may have occupy and hold the offices of escheator and clerk of the market within the same borough the liberties and precincts thereof together with all and singular the things after what manner soever belonging or appertaining to the said offices respectively and that every mayor of the said borough for the time being may have power and authority to execute and do all things which are any ways belonging or incumbent to the offices of escheator and clerk of the market respectively within the said borough of Derby the limits and precincts thereof without any molestation or hinderance of us our heirs or successors or of any of our ministers or officers whatsoever AND FURTHER for the melioration of the state of the said borough and that all common charges there from time to time may be the better and more easily supported we of our especial favour and from our certain knowledge and mere motion for us our heirs and successors do give and grant to the aforesaid mayor and burgesses of the borough aforesaid and to their successors all and all manner of *issues fines amerciaments redemptions and penalties* lost and forfeited of all and singular the burgesses of the borough aforesaid and also of all and singular the inhabitants or resiants within the borough aforesaid the liberties and precincts of the same and any of them in whatsoever courts of us our heirs or successors as well before us our heirs and successors as before us our heirs and successors in the chancery of us our heirs and successors and before the commissioners of our treasury the treasurers and barons of the exchequer of us our heirs and successors and before the barons of the exchequer of us our heirs and successors and also before the justices of the bench of us our heirs and successors and also before the justices of oyer and terminer of us our heirs and successors within the aforesaid county of Derby and before the justices of assize of us our heirs and successors to be held in our said county of Derby and before the justices of jail delivery in the said county of Derby assigned or to be assigned and also before the justices of us our heirs and successors to keep the peace within the said county of Derby assigned or to be assigned to hear and determine divers felonies trespasses and other misdemeanours in the said county and before the clerk of the market of us our heirs or successors in the aforesaid county of Derby and before the mayor recorder and common clerk and last precedent mayor and four senior aldermen of the borough aforesaid for the time being or any three of them as aforesaid being justices of the peace of us our heirs and successors within the borough aforesaid the liberties and precincts of the same and before the mayor of the same borough for the time being being clerk of the market of us our heirs and successors within the same borough the liberties and precincts thereof and before the steward and marshall of the household of us our heirs and successors within the aforesaid county of Derby and before

the escheator of us our heirs and successors in the county of Derby aforesaid and also before all other justices or ministers of us our heirs and successors as well in the presence of us our heirs and successors as in the absence of us our heirs and successors and also forfeitures lost and imposed in the court leet and view of frank pledge by these presents granted And that it may and shall be lawful for the said mayor and burgesses of the borough aforesaid and for their successors all and singular such issues fines amerciaments redemptions pains and forfeitures and all and singular the premises above by these presents before granted from time to time to collect take seize and levy by the proper officers of the said mayor and burgesses and their successors and that without any writs warrants or precepts from the exchequer of us our heirs and successors or from any other courts at Westminster to be sued forth made or any ways obtained any law usage course or custom of the said exchequer or any other our courts heretofore had made or used or any other thing to the contrary thereof notwithstanding and the same issues fines amerciaments forfeitures and profits to receive have and convert to the proper use and behoof of the aforesaid mayor and burgesses and their successors for ever without account or other thing therefore or any part or parcel thereof to be yielded paid or made to us our heirs and successors and without impeachment hinderance or impediment of us our heirs and successors or of the justices sheriffs escheators coroners or any other officers or ministers of us our heirs and successors PROVIDED always and we do by these presents reserve to us our heirs and successors from time to time and at all times hereafter power to remove and declare to be removed any justice or justices of our peace of the borough aforesaid for the time being from their offices aforesaid respectively at the will and pleasure of us our heirs and successors by letters under the signet of us our heirs and successors And as often as we our heirs or successors by any such letters patent under the signet of us our heirs and successors shall declare such justice or justices of the peace of the borough aforesaid for the time being to become and be removed from his or their offices aforesaid That then and from thenceforth the justice or justices so declared or to be declared to be removed from their several and respective offices may and shall forthwith be removed and without any further process bona fide to all intents and purposes whatsoever and thus as often as the case shall so happen any thing in these presents contained to the contrary thereof in any wise notwithstanding And then and in such case from time to time as the case shall thus happen within convenient times after such removal another fit person or persons shall and may be elected and chosen in the respective place or places of such person or persons so removed in manner above in these presents mentioned MOREOVER we will and out of our especial favour and from our certain knowledge and mere motion we give grant and confirm for us our heirs and successors to the aforesaid mayor and burgesses of the borough aforesaid and to their successors that they for ever may have these *seven fairs* within the borough aforesaid and the liberties of the same every year to be held separately in manner and form following (to wit) that the same mayor and burgesses of the borough aforesaid and their successors may have and hold one of the said fairs at the said borough of Derby every year for ever upon Friday in Easter week and to continue and endure for all that day and the day after Another of the said fairs at the said borough on Friday next after the feast of Philip and James commonly called May-day and to continue and endure for all that day and the day after Another of the said seven fairs at the said borough upon Friday in Whitsun week and the day next preceding that day and to continue and endure for the whole of those days Another of the said seven fairs at the said borough upon Friday next after the feast of the nativity of Saint John the Baptist commonly called Midsummer-day and to continue and remain for all that day and the day after Another of the said seven fairs at the said borough upon the feast of Saint James the Apostle commonly called Saint James's day and to continue and endure for that whole day and upon the day next after that feast and the day next following Another of the said seven fairs at the said borough upon Friday next after the feast of Saint Michael the Archangel and to continue and endure for all that day and the day after And another of the aforesaid seven fairs at the aforesaid borough upon Friday next after the feast of Epiphany commonly called twelfth-day and to continue and remain for all that day and the day after AND also out of our favour we do for us our heirs and successors give grant and confirm to the aforesaid mayor and burgesses of the borough aforesaid and their successors that they may have and hold and be able to have and hold within the borough aforesaid as they have heretofore been accustomed to have and hold a *free market* every Friday in every week throughout the year for ever with the tolls and all the liberties a court of piepowder and the free customs to fairs marts and markets of that kind belonging or appertaining so that the aforesaid fairs marts and markets be not to the prejudice of other neighbouring markets fairs or marts WHEREFORE we will and command for us our heirs and successors that the aforesaid mayor and burgesses of the borough aforesaid and their successors may for ever have and hold the fairs aforesaid at the said borough or within the liberties thereof every year and their markets every week as aforesaid for ever And that they may have power to have take and levy in all and singular the fairs marts and markets aforesaid such *reasonable toll* for beast cattle and other things in the fairs and markets aforesaid sold and bought as they have heretofore lawfully had and received AND FURTHER we will and by these presents for us our heirs and successors do grant to the aforesaid mayor and burgesses of the borough aforesaid and their successors that the mayor and burgesses of the said borough of Derby aforesaid and their successors shall not be obliged to appear nor be put or impannelled nor any of them to be obliged to appear or be *put or impannelled in any assizes* juries inquisitions appeals rights injuries felonies slanders or demands whatsoever before the justices of us our heirs and successors of assize or writs of nisi prius or to hear and determine treasons felonies or other misdemeanours or for the peace within our county of Derby or before any other justices or ministers of us our heirs or successors except before the aforesaid mayor recorder common clerk last precedent mayor and the four most ancient aldermen for the time being being justices assigned to keep the peace within the same borough And except before the mayor recorder last precedent mayor and common clerk of the borough aforesaid judges of the court of record in the said borough as aforesaid mentioned nor shall they or any of them forfeit any amerciaments by reason thereof to us our heirs or successors but therefrom and of all tolls due and payable to us our heirs and successors they and every of them may and shall be from time to time acquitted and discharged AND FURTHERMORE we will and by these presents for us our heirs and successors DO grant to the aforesaid mayor and burgesses of the borough aforesaid that if any person or persons being a burgess or freeman or burgesses or freemen of the same borough for the time being shall be lawfully named and chosen according to the manner and form in these letters patent expressed or according to the manner and form in the same borough heretofore had and used to bear and exercise any office or place in the same borough and such person or persons having due notice of such election had and made shall refuse to accept of or exercise the office or place or offices or places to which he or they shall be so nominated and chosen that then and so often it may and shall be lawful for the mayor aldermen brethren and capital burgesses of the borough aforesaid for the time being or the major part of them to *tax and impose reasonable fines* and amerciaments upon such person or persons so refusing as to the said mayor aldermen brethren and capital burgesses of the borough aforesaid or the major part of them shall seem expedient although such person or persons so nominated and elected or to be nominated and elected to bear any office or place in the borough aforesaid at the time of such nomination and election be not or shall be resident inhabiting or dwelling within the borough aforesaid or the liberties thereof so that such person then may and shall be a burgess and freeman of the same borough AND that it may

and shall be lawful for the same mayor and burgesses of the borough aforesaid and their successors by the chamberlains of the borough aforesaid or other their proper officers or ministers to recover levy and put themselves into seizin and possession of the same fines and amerciaments aforesaid by imprisonment of the body or by distress of the goods and chattels of such person or persons as aforesaid refusing being within the borough or liberties of the same or by any other lawful means whatsoever and the same to the use and behoof of the said mayor and burgesses and their successors to receive and detain without account thereof to be yielded to us our heirs or successors and without the hinderance of us our heirs or successors or any officers or ministers of us our heirs or successors whatsoever AND FURTHER we will and by these presents for us our heirs and successors do grant to the aforesaid mayor and burgesses of the borough of Derby aforesaid and their successors that no merchant or tradesman or other person using or exercising any occupation or mystery whatsoever who is or shall *not be a burgess or freeman* of the borough aforesaid may use or exercise any occupation or mystery within the said borough or the liberties of the same or have or use any house shop ar station within the borough aforesaid or the liberties of the same for the sale or utterance of any merchandises there or for the use or exercise of any occupation or mystery there unless at the times of the fairs marts and markets aforesaid within the borough aforesaid and the liberties of the same to be held WHEREFORE we will and by these presents for us our heirs and successors DO charge and command all and singular persons whatsoever besides the aforesaid burgesses or freemen of the borough aforesaid for the time being and their servants and apprentices that neither they nor any of them shall enter the said borough or the liberties thereof or have or use or presume to have and use any house shop place or station within the borough aforesaid or the liberties thereof for the selling or uttering of any merchandises there except only at the times of the fairs marts and markets aforesaid hereafter to be held within the borough aforesaid and the liberties of the same and that no foreign butcher shall sell or expose to sale any meat or flesh within the borough aforesaid upon market days before the *ringing of the bell* and after the sun setting as hath been there used And that under such pains penalties and forfeitures as by the laws and statutes within our realm of England or otherwise may be lawfully inflicted or imposed upon such offenders for contempt of our royal command in this behalf AND MOREOVER by these presents for us our heirs and successors we give and grant to the aforesaid mayor and burgesses of the borough of Derby aforesaid and to their successors special licence power and authority to have procure receive and possess to themselves and their successors for ever any manors messuages lands tenements meadows pastures feedings woods underwoods rectories tithes rents reversions and other hereditaments whatsoever as well of us our heirs or successors as of any other person or persons whatsoever which are not held of us our heirs or successors immediately in capite nor by knight's service nor of any other person by knight's service so that such manors messuages lands tenements and other hereditaments exceed not the clear annual value of £150. per annum beyond all charges and reprises the statute of mortmain or any other statute act ordinance or provision in any other thing cause or matter whatsoever to the contrary thereof in anywise notwithstanding WE also give and by these presents for us our heirs and successors DO grant to every subject or subjects of us our heirs or successors special licence and free power and authority that they or any of them may be able and capable to give grant sell devise or alien lawfully and with impunity any manors messuages lands tenements or other hereditaments whatsoever which are not held of us our heirs or successors immediately in capite nor of us or others by knights' service to the aforesaid mayor and burgesses and their successors so that the aforesaid manors messuages lands tenements and hereditaments so to be given granted aliened or devised to the same mayor and burgesses and their successors as aforesaid exceed not in the whole the clear annual value or rent of £150. per annum beyond all charges and reprises the statute of mortmain or any other thing cause or matter whatsoever to the contrary thereof in anywise notwithstanding AND FURTHER we will and by these presents for us our heirs and successors do give and grant licence and authority to the aforesaid mayor and burgesses of the borough aforesaid and to their successors that the mayor and aldermen of the borough aforesaid and their successors for the time being may be empowered and enabled to wear and use such and the like *robes and garments* at their pleasure as the mayor and aldermen of our town or borough of Nottingham now use or heretofore have used without any hinderance or disturbance whatsoever AND FURTHER we do by our like special favour and certain knowledge and mere motion for us our heirs and successors give grant and confirm to the aforesaid mayor and burgesses of the borough aforesaid and to their successors all and singular letters patent charters and confirmations of our dearest progenitors or ancestors whatsoever to the said mayor and burgesses of the borough of Derby aforesaid or their predecessors by whatsoever name or names of incorporation in former times made granted or confirmed and all and singular gifts grants confirmations restitutions customs ordinances and articles and all other things whatsoever letters patents or charters of whomsoever our progenitors or ancestors late kings or queens of England and also all and singular the things in the said letters patents charters grants confirmations or any of them contained recited specified confirmed or explained and all and singular jurisdictions authorities exemptions privileges liberties franchises immunities free customs whatsoever with the alterations additions explanations and declarations above mentioned and also the borough or manor of Derby with all its appurtinancies and also all and singular the lands tenements and hereditaments whatsoever which the aforesaid mayor and burgesses of the borough aforesaid now have hold use and enjoy or which they or their predecessors by the name aforesaid or by the name of the bailiffs and burgesses of the borough of Derby or by the name of the burgesses of the borough of Derby or by any other name whatsoever or by whatsoever incorporation or by virtue of any letters patents charters or confirmations of us or any of our progenitors predecessors or ancestors formerly kings or queens of England any ways heretofore made granted or confirmed or by whatsoever other legal manner or title custom use or prescription or heretofore used had or accustomed or had held used or enjoyed or ought to have hold use or enjoy We do ratify and make free and for us our heirs and successors as much as in us lies do accept and approve and all and singular the things to the said mayor and burgesses of the borough of Derby aforesaid and to their successors by virtue of these presents DO grant ratify and confirm although the same or any of them have been disused abused or discontinued and although the same or any of them may or shall be lost TO HAVE hold enjoy and exercise all and singular the premises to the said mayor and burgesses of the borough of Derby aforesaid and to their successors for ever as fully freely and entirely and in as ample manner and form as if separately distinctly and by name they had in these presents been expressed nominated declared and recited YIELDING therefore and doing yearly to us our heirs and successors all such so many the same and such like rents services tenures and demands as and which to us or our progenitors or ancestors for the same premises or any of them heretofore were due payable or answered and no others nor more We also will and by these presents for us our heirs and successors of our especial favour do grant that although the same mayor and burgesses of the borough aforesaid or their predecessors any authorities jurisdictions liberties privileges franchises immunities discharges and free customs in the letters patent and charters aforesaid or any of them contained or any their customs in any case happening hitherto have not used but perhaps have abused yet they the said mayor and burgesses of the borough aforesaid and their successors their same authorities jurisdictions liberties privileges franchises immunities discharges and free customs whatsoever totally disused or abused and every of them from henceforth fully may enjoy and use without the action or hinderance of us our heirs or successors the justices

sheriffs coroners escheators or any other bailiffs or officers of us our heirs or successors any cause matter or thing whatsoever in times past to the contrary thereof had made or provided notwithstanding Willing and by these presents commanding and charging as well the commissioners of our treasury the treasurer chancellor and barons of our exchequer Westminster and other the justices and officers of us and of our heirs and successors as the attorney general for the time being and every of them and all other our officers and ministers whatsoever that neither they nor any of them do prosecute or continue or cause to be prosecuted or continued any writ or summons of *quo warranto* or any other our writ writs or process whatsoever against the aforesaid mayor and burgesses of the borough aforesaid or any of them for any causes things matters offences claim or usurpation or any of them by them or any of them claimed used attempted had or usurped before the day of the making of these presents WILLING also that the mayor and burgesses of the borough aforesaid or any of them by any of the justices officers or ministers aforesaid in or for the use claim or abuse of any other liberties franchises or jurisdictions within the borough aforesaid limits or precincts thereof before the day of making these our letters patents be not molested hindered or compelled to answer the same or any of them AND FURTHER we will and by these presents for us our heirs and successors do ordain and firmly enjoining command that the mayor aldermen brethren common councellors recorder common clerk and all other our officers and ministers of our borough aforesaid and every of them by virtue of and according to the tenor of these our letters patents made or constituted or hereafter to be named chose or constituted before they or any of them to the execution or exercise of the office or offices place or places to which they may or shall be so respectively nominated appointed or constituted be admitted or otherwise in that behalf respectively enter shall take as well a corporal oath called the *oaths of allegiance* and *supremacy* and all other oaths upon God's holy evangelists appointed by the statutes of this our realm of England for such officers and persons as make do and subscribe all declarations 'and subscriptions in any statutes by such officers and persons aforesaid in like manner appointed before such person or persons as and which for the giving and taking such oaths declarations and subscriptions by these presents as by the statutes of this our realm of England now or hereafter may or shall be appointed and framed PROVIDED also and we will that every person from henceforth to be admitted into the freedom of the borough aforesaid before his admission shall take do and subscribe the distinct oath last above mentioned as the declarations and subscriptions aforesaid before the mayor and aldermen of the borough aforesaid for the time being or four of them to which said mayor and aldermen or four of them we do by these presents give and grant full power and authority to give and administer the aforesaid oaths so that there be express mention of the true yearly value or certainty of the premises or of some of them or of the other gifts or grants by us or by any of our progenitors or ancestors to the aforesaid mayor and burgesses heretofore not made in these presents or any statute act ordinance provision proclamation or restraint to the contrary thereof heretofore had made set forth ordained or provided or any other thing cause or matter whatsoever notwithstanding IN WITNESS whereof we have caused these our letters to be made patents WITNESS ourself at Westminster the fifth day of September in the thirty-fourth year of our reign.

By the King himself,
PIGOTT.

(No. 16.)

WORTHIES OF DERBYSHIRE.

Benefactors of the County of Derby.

Names.	*Places.*	*A. D.*
Abbot Michael	Morley	
Adams John	Church Gresley ...	1682
Akroode John	Brampton	1705
Alcroft John	Staveley	1768
Alfred Mr.	Hazlewood	
Allen Thomas	Stretton in the Fields	
Allson Edmund	Croxall	
Allsop Rev. Thomas ...	Boylston	1682
Allsop Rev. Thomas ...	Boylston	1715
Allsop John	Findern	1714
Allsop Thomas	Hognaston	1679
Allsop William	Parwich	1728
Andrew William	Brampton	
Archer John, esq.	Bakewell	1802
Arkwright Sir Richard ...	Cromford	1794
Arkwright Richard, esq.	Cromford	1830
Armine Lady	Cromford	1662
Ash Francis	Derby	1657
Ashbourn Rachael ...	Great Rowsley ...	1752
Ashton Benjamin, esq....	Hathersage	1725
Astill Mary	Hilton	1786
Babington Augustine ...	Derby	
Babington ———	Normanton	
Bagshaw William	Glossop township	1701
Bagshaw Mary	Bowden Edge sch.	
Bagshaw Richard	Castleton	1749
Bagshaw Mrs. Elizabeth	Wirksworth parish	1797
Bagshaw ———	Bakewell	

Names.	*Places.*	*A.D.*
Bagshaw Robert	Tideswell	1670
Bagshaw William	Litton and Wormhill	
Bagshaw Richard	Wormhill	1749
Bagshaw John	Great Hucklow ...	1704
Bailey Mrs. Abigail ...	Walton on Trent	1760
Bailey John	Breadsall	
Bailey ———	Boylston	
Baker Robert	Ideridgehay ...	1621
Bakewell Lucy	Doveridge	1798
Balguy Henry	Hope School and Darwent Chapel	
Ball Anne	Horsley Woodhouse	
Banks Rev. Lawrence ...	Dronfield	1662
Barber Thomas	Chapel-en-le-Frith	1687
Barber William	Chapel-en-le-Frith	1666
Barber Hugh	Hathersage ...	1606
Bargh John	Great Barlow ...	1798
Barker Robert	Beeley	1730
Bartholomew John ...	Monyash	1720
Baskerville Edward ...	Kedleston	1713
Bateman Sir Hugh ...	Derby	
Bateman Richard, esq....	Hartington	1771
Bateman Robert, esq. ...	Hartington ...	1644
Bayley Rev. John ...	Kirk Langley ...	1752
Bayley Mrs. Frances ...	Kirk Langley ...	1768
Bearcroft Rev. Thomas	Walton on Trent	1680
Beaumont Alice	Derby	

Names.	*Places.*	*A.D.*
Bedford Rev. William ...	Walton on Trent	1659
Bedford Bridget	Walton on Trent	1659
Belfit James	Bradbourn	1727
Bennett ———	Glossop township	1716
Bennett Edward	Castleton	1720
Bennett John	Hayfield	1731
Bennett Edward	Hayfield	
Bennett Matthew	Hartington	1758
Beresford John	Chaddesden ...	1813
Beresford William ...	Parwich	1695
Bill Robert	Norbury	
Binckcliffe Margaret ...	Parwich	1788
Blackburne Elizabeth ...	Wirksworth ...	1754
Bloodworth John	Derby	
Boler John	Shirebrook	1733
Boote Anthony	Bradbourn	1712
Boot Lydia	Shirland	1726
Boot Samuel	Blackwell	1736
Boot Jane	Alfreton	1795
Booth Henry	Glossop township	1740
Boothby Lady	Ashbourn	1817
Botham William	Derby	1603
Botham and others ...	Mickleover	
Bothe ——	Sawley	
Bott Robert	Bakewell	1665
Bould Henry	Snelston	1804
Bowdon George	Chapel-en-le-Frith	1633
Bower George	Ashover	1677
Bower Sarah	Ashover	
Bower Ralph	Mellor	1730
Bower John	Kirk Ireton	1744
Bowyer Arthur	Marston Montgomery	
Boylstone Henry	Lullington	1661
Bradley Joshua	Matlock	1738
Bradshaw Francis	Chapel-en-le-Frith	1635
Brailsford Elizabeth ...	Tapton, Brimington and Staveley	1794
Brailsford Thomas ...	Staveley	1711
Brailsford Mrs.	Staveley	1733
Brailsford Job	Tupton and North Winfield	1655
Bray Joseph	Glossop township	1793
Bray Sarah	Glossop township	1796
Bray Campion	Castleton	1825
Bright William, sen. ...	Barlborough ...	1708
Bright Joseph	Whitwell	
Brocksop John	North Winfield ...	1790
Bromley Rebecca	Darley Dale ...	1778
Broomhead Catherine ...	Bakewell	1754
Broomhead Mr. —— ...	Eckington	
Brough Theodosia... ...	Derby	1723
Brownhill George	Bamford	1728
Brunt ———	Snelston	
Buckley Edmund	Mellor	1722
Buckley Ellen	Wirksworth ...	1680
Bugbury Thomas	Egginton	1723
Bulkeley Elizabeth ...	Whittington ...	1740
Bull Robert	Cubley	1708
Bunting Anthony	Wirksworth ...	1685
Bunting Francis	Wirksworth ...	1693
Bunting John	Ashover	1666
Burdett Mary	Foremark and Ingleby	1697
Burdett Dorothy	Repton	1717
Burgh Mary	Doveridge	1772
Burgin Camilla	Aston on Trent	
Burton Elizabeth	Whittington ...	1757
Butcher Phillis	Killamarsh	1746
Buxton Thomas	Doveridge	
Buxton Elizabeth	Winster	1730
Buxton Elizabeth	Ashbourn	1750
Buxton George	Bradbourn and Brassington	1655
Buxton John	Brassington ...	1699
Buxton German	Brassington	
Buxton German	Wirksworth ...	1765
Byrom Thomas	Derby	1714
Cadman Peter	Eckington	
Calton Peter	Brampton	1679
Calton Thomas	Ashover	1715
Calvert ———	Edlaston and Wyaston	
Calvert Humphry ...	Yeavelcy	

Names.	*Places.*	*A.D.*
Camm Thomas	Eckington ...	1702 / 1715
Carrington Sarah	Glossop township	1758
Cavendish Lord James	Staveley	1742
Cavendish Lady	Staveley	1734
Challonor William... ...	Boylston	1675
Challonor Robert	Boylston	1705
Challonor John	Boylston	1705
Champion Joseph	Hope	1784
Chapman Humphry ...	Baslow	1777
Charlton Catherine ...	Sandiacre	1720
Charlton John	Breaston	1715
Chatterton Thomas and others	Ashbourn	1811
Chatterton Mary	Hayfield	
Cheetham Dr.	Etwall and Burnaston	
Cheney Mrs. Bridget ...	Kirk Langley ... Wirksworth ... and Kirk Ireton	1821 1822
Cheshire Isaac	Derby	
Clarke Rev. John ...	Stanton by Bridge	1716
Clarke George	Coton in the Elms	1659
Clarke John	Mapperley	1681
Clarke Daniel	Matlock	1736
Clarke Sir Gilbert	Brampton	1701
Clarke Daniel	Matlock	1726
Clarke Sir Gilbert	Doveridge	1681
Clarke John	Temple Normanton	1783
Clayton Rev. John... ...	Breadsall	1745
Clayton Joseph	Elton	1811
Coke D'Ewes, esq.... ...	Totley	
Coke Rev. D'Ewes... ...	Pinxton	1811
Coke Sir Robert	Longford	1687
Coke Lady Catherine ...	Longford	1688
Coleclough Christopher	Mapperley	1754
Coleclough Samuel ...	Mapperley	1813
Comings Richard	Repton	1801
Cook William...	Barlborough ...	1640
Cooper Elizabeth	Aston on Trent ...	1728
Cooper Robert	Aston	1720
Cooper John	Compton	1801
Cooper Robert	Kirk Ireton	1728
Cooper George	Dronfield	1763
Copestake Walter	Marston Montgomery and Norbury	1715
Cotterill Elizabeth ...	Hartington	1814
Cox ———		
Cox Joyce	Stapenhill	
Cragge Wm. & Elizabeth	Bonsall	1704
Crashaw John	Great Barlow ...	1816
Creswell Rev. Jacob ...	Hope	1722
Creswell Mrs.	Hope	1730
Creswell Mary	Litton	
Crofts Anne	Staveley	1729
Crossland Robert		
Crowshaw Richard ...	Derby and Mackworth	1603
Crowshaw Robert	Derby	1651
Cunliff Alice	Etwall and Burnaston	
Cunliff Ellis	Etwall and Burnaston	
Cundy Dorothy	Derby	1697
Curry Rev. John	Sutton	1693
Curtys Thomas	Unstone	1701
Curzon Sir Nathaniel and others	Monyash	1752
Curzon Sir John	Quorndon	1725
Dakeyne George	Parwich	1757
Dakin Thomas	Castleton	1706
Dakin Griffith	Spondon	1725
Dakin Mrs.	Morley	
Dale Elizabeth	Dronfield	1745
Dale Thurstan	Brassington	1742
Dale Thurstan	Parwich	1653
Dale Robert	Brassington and Parwich	1714
Dance Isaac	Doveridge	
Dane Edward	Chapel-en-le-Frith	1699
Darby Sarah	Lullington	
Darby Thomas	Lullington	1715
Dawson Mary	Beeley	
Day Mary	Derby	1669

Names.	*Places.*	*A.D.*
Deane Daniel	Wirksworth and Derby	1637
Debanke John	Marston on Dove	
Denton Joan	Ashbourn	1625
Derrey William	Hault Hucknall ...	1794
Dethick Rev. William ...	Hartshorn ...	1624
Devonshire Christiana Countess of	Shottle, Postern and Pentrich	
Devonshire Wm. Earl of	Shottle, Postern and Pentrich	
Devonshire Duke of ...	Eyam	
Devonshire Wm. Earl of	Buxton	
Devonshire Countess of	Derby and Edensor	1674
Devonshire Earl of ...	Hault Hucknall, Peak Forest, &c.	
Dewce John	Dore	
Dewsnapp John	Glossop	1736
Dewsnapp John	Glossop	1777
Dickenson George	Dalbury	1638
Dixon Mrs. Catherine ...	Staveley	1796
Dixon Edward	Chapel-en-le-Frith	
Dixon Mary	Chapel-en-le-Frith	1696
Docksey Robert	Snelston	1704
Dodd Thomas and John	North Winfield ...	1617
Dooley Rebecca	Shottle and Postern	
Dowker Samuel	Sutton and Bolsover	1738
Downes Miss	Tideswell	1811
Doxon Mary	Glossop	1815
Drayton Harrington ...	Lullington	1703
Drew Mrs.	Whitwell	1708
Duffield William	Derby	1659
Earpe John	Mickleover	1712
Elliott William	Curbar	1703
England Edward	Whitwell	
Ensor William	Tissington	1777
Eyre Thomas	Hathersage, Darwent and Outseats	1642
Eyre John	Darwent & Woodland	1772
Eyre Thomas, esq. ...	Winster	
Eyre Rowland, esq. ...	Hassop, Rowland, Calver & Longstone	1624
Everett Mrs.	Glossop	
Faldering Margery ...	Doveridge	1685
Fanshawe Henry, esq. ...	Dronfield	1567
Fearn Henry	Kniveton	
Ferne Agnes	Wirksworth ...	1574
Fidler Mrs.	Shirland	1820
Fidler Thomas	Shirland	1724
Fielding John	Glossop	1755
Finch Rev. Dr.	Eyam	
Fitz Herbert Wm. esq....	Tissington	1735
Fitz Herbert Francis, esq.	Tissington	
Fletcher Mr.	Hartington	
Fletcher Samuel	Derby	1695
Foljambe Sir Godfrey ...	Brampton and Brimington ...	1594
Foljambe Godfrey, esq.	Wingerworth, Chesterfield, &c.	
Foljambe Francis, esq....	Hope	1688
Fosbrooke Leonard, esq.	Aston on Trent ...	1735
Fowler Rebecca	Derby	
Fox Joseph	Hope and parish	
Fox Elizabeth	Woodland and Darwent	
Foxlowe Dorothy	Staveley	1796
Fretcheville Right Hon. Lady	Eckington	1719
Fretcheville Margaret ...	Staveley	1601
Fretcheville Peter, esq....	Woodthorpe ...	1632
Fretcheville Sir Peter ...	Staveley	1675
Frith John	Chapel-en-le-Frith and Peak Forest	1775
Frith Samuel	Peak Forest ...	1773
Frost Mary	Sheldon and Chapel-en-le-Frith	1755
Frost George	Edlaston and Wyaston	
Frost John	Hathersage	1773
Garlick William	Glossop	1686
Garlick Nicholas	Glossop	1750

Names.	*Places.*	*A.D.*
Garlick John	Glossop	1757
Garratt Thomas, esq. ...	Darley in the Dale and Matlock ...	1791
Gaskill Francis	Chapel-en-le-Frith	1718
Gaunt Thomas	Kniveton	
Gee Henry	Wirksworth ...	1619
Gee Francis	Chapel-en-le-Frith	1679
Gell Anthony, esq. ...	Wirksworth ...	1584
Gell Temperance	Carsington	1722
Gell Sir Philip	Hopton	1719
Gilbert Henry, esq. ...	Chaddesden	
Gilbert William	Repton	1706
Gilbert and others ...	Alvaston	
Gilbert Thomas	Spondon	1657
Gilbert William	Spondon	1649
Gilbert William	Duffield	1565
Gilberthorpe George ...	Whittington ...	1729
Gisborne John, Derby ...	Hilton	
Gisborne Rev. James ...	Staveley	1759
Gisborne Anne	Staveley	1762
Gisborne John	Derby	1689
Gisborne John, jun. ...	Derby	1704
Gisborne Rev. Francis...	100 Parishes and to the Infirmary ...	1818
Glen Mr.	Doveridge	
Glossop Henry	Brampton	1748
Glossop Anthony	Derby	
Godly Godfrey	Dronfield	1619
Godfrey Godfrey	Barlborough ...	1629
Goodale Dame	Morley and Smalley	
Goodall Robert	Shirley	
Goodwin Francis	Derby	1626
Goodwin others and Roose	Ashford	1761
Goodwin George	Monyash school and Monyash	1724
Goodwin Hugh	Monyash	1726
Gray Thomas	Melbourn	1691
Gray Willoughby, esq.		
Greatorex William ...	Wirksworth ...	1734
Green Henry	Melbourn	1679
Green Robert	Beighton	1712
Green Nicholas	Peak Forest ...	1700
Green William	Totley	1786
Greensmith ——	Norbury	
Grey Mrs. Elizabeth ...	Sandiacre	1721
Grey Hon. Anchetil ...	Sandiacre	1721
Grey Mrs. Elizabeth ...	Risley school ...	1718
Griesley Catherine ...	Lullington	1664
Hacker Francis	Sawley	1676
Hadfield John	Elton	
Hadfield Charles ...	Glossop	1795
Hadfield Thomas ...	Glossop	1743
Hadfield Moses ...	Glossop	1728
Hague Joseph, esq. ...	Glossop, Whitfield school, &c. ...	1779
Hague Joseph, esq. ..	Glossop	1785
Hague John	Hayfield school ...	1781
Hague Dorothy	Hayfield school	
Hall Dorothy	Dronfield	1711
Hall William	Winster	1685
Hall Susannah	Measham	
Hall Deborah	Measham	
Hammersley Nathaniel	Tideswell ...	1736
Hanson John	Ashbourn ...	1678
Hancock John	Yolgrave ...	1821
Harestaffe John	Sudbury ...	1641
Harpur Mrs. Joyce ...	Stanley, Derby, Etwall and Burnaston	
Harpur John and others	Stenson and Findern	
Harpur Dame Catherine	Ticknall	1741
Harpur Sir Henry and others	Breadsall ...	1788
Harpur John, esq.... ...	Boylston and Cubley	1686
Harpur Charles, esq. ...	Ticknall	1770
Harris William ...	Ashford school ...	1650
Harrison Arthur ...	Hilton	1659
Harrison Thomas ...	Hilton	
Harrison William ...	Hilton	
Harrison John ...	Glossop	1746
Harrison John	Buxton	

Names.	*Places.*	*A.D.*
Harrison Thomas ...	Glossop	1706
Hastings Lady Elizabeth	Melbourn	
Hartley Henry	Brampton ...	1592
Haughton Thomas ...	Derby	1729
Hawkins Isaac	Ashbourn	
Haynes Joseph	Winster	1706
Hayward Godfrey ...	Wensley and Snitterton	1732
Hayward Charles ...	Taddington ...	1773
Hayward Robert ...	Carsington ...	1701
Hazard John	Hartshorn	
Heacock Robert ...	Etwall and Burnaston	1765
Heacock ——	Hilton	
Heath Dorothy	Brampton ...	1793
Heathcote Rowland ...	Hartington ...	1818
Heathcote and others ...	Staveley	1714
Heathcote Rev. Ralph...	Staveley	1715
Hemings ——	Radbourn	
Heppenstall Frances ...	Barlborough ...	1662
Hewitt Roger	Staveley	1731
Hewitt William	Killamarsh ...	1480
Heyrick Mr.	Chellaston	
Hickling William ...	West Hallam ...	1673
Hibbert Robert	Alvaston	
Hibbert Catherine ...	Morley	
Hibbert Samuel ...	Morley	
Hibbert Thomas ...	Chapel-en-le-Frith	1676
Hibbert Joshua	Brampton	
Higginbottom William...	Taddington ...	1762
Higginbotham Jeremiah	North Winfield ...	1790
Hill William	Wessington ...	1722
Hill James	Hartington ...	1712
Hill William	Measham	
Hill Samuel	Measham	
Hind John	Whittington ...	1724
Hitch Rev. Robert ...	Staveley	1676
Hoades Mary	Wirksworth ...	1702
Hodges Margaret ...	West Hallam ...	1749
Hodkin James	Staveley	1787
Hodgkinson Robert ...	Tideswell ...	1592
Hodgkinson Richard ...	Ashover	
Hodgkinson Elizabeth ...	Ashover	1733
Holbrooke William ...	West Hallam ...	1794
Holden Anne	Weston on Trent	1766
Holland James, of Ludlow	Heage	1744
Holland Richard ...	Buxton	
Hollingworth —— ...	Long Eaton	
Hollingworth Thomas...	Staveley	1721
Hollingworth Widow ...	Staveley	1728
Hollingworth Thomas...	Sawley	1675
Holme Joseph	Longford	1768
Holmes Samuel	Whittington ...	1753
Holmes William ...	Tideswell	
Horton Francis, esq. ...	Croxall ...	1785
Hough Peter	Derby, Dalbury, Mackworth and Kirk Langley ...	1689
Hough Ralph	Repton	1657
Hough ——	Radbourn	
How Robert	Castleton	1818
Howitt John	Long Eaton	
Hullock Rev. Henry ...	Measham	
Hunt Rev. William ...	Repton	1736
Hunter Thomas ...	Horsley, Ripley, and Alfreton ...	1735
Hunter ——	Wessington	
Hurd John	Kniveton ...	1715
Hurt Francis, esq.... ...	Heage	liv.
Hurt Grace	Alderwasley ...	1757
Hurt Nicholas	Ashbourn ...	1637
Hutchinson John	Kirk Ireton ...	1643
Ibbotson and others ...	Hathersage	
Inman ——	Eckington	
Jackson Henry	Marston Montgomery, Norbury and Ch. Broughton	1690
Jackson Henry	Ideridgehay ...	1752
Jackson Frances ...	Stapenhill	
Jackson George, M. D.	Derby	
Jacson Anne	Staveley	1745

Names.	*Places.*	*A.D.*
Jacson Anne	Sutton on the Hill	1722
James Jane	Ashbourn	1669
James Edward	Ockbrook and Morley	1709
James William	Ockbrook ...	1732
Jebb Joshua	Brimington ...	1794
Jennings John	Etwall	1657
Jeram Charles	Breaston ...	1715
Jessop William	Beighton	1660
Johns Thomas	Matlock	1667
Johnson Richard ...	Scarcliff	1714
Johnson James	Ockbrook	
Johnson Richard ...	Ashford	1674
Johnson John	Barlborough ...	1649
Johnson Richard ...	Bolsover	1714
Johnson Anne	Breadsall	
Johnson Francis ...	Parwich	1800
Kay John	Killamarsh ...	1741
Keen William	Breadsall	
Kent Thomas	Coal Aston ...	1695
Kilby Richard	Derby	1619
Kinder Richard	Brampton	
Kirk John	Ashover	
Kirk Henry	Chapel-en-le-Frith	1731
Kirkland Paul	Edlaston, Wyaston and Yeldersley	
Kirkland John	Crich	1562
Kniveton Thomas ...	Osmaston ...	1712
Labonelle Rev. Samuel	Brailsford ...	1714
Lamb Hon. George ...	Melbourn ...	liv.
Lamb Hon. Lady ...	Melbourn ...	liv.
Large Edward	Derby and Chesterfield	1709
Laverack James ...	Shirland	1774
Lawrence Samuel ...	Scarcliff	1697
Lawrence Rev. Benjamin	Darley in the Dale	1827
Leach Francis	Sutton and Bolsover	
Leaper Henry	Mapperley	1791
Lees Mrs.	Windley	
Lees Dorothy	Middleton by Wirksworth ...	1648
Levitt Mrs.	Walton on Trent	1760
Linacre George	Derby	1703
Littlewood John	Bamford ...	1745
Liversage Robert ...	Derby	1529
Locko John, Holbrook	Belper and Holbrook	1676
Locko John	Spondon	1665
Locko John	Horsley Woodhouse and Kilburne	
Lomas Edward	Buxton	
Lowe Richard	North Winfield	
Lowe John	Marston Montgomery	1686
Lowe Mary	Denby	
Lowe Ellen	Wingerworth ...	1669
Luddington Thomas ...	North Winfield ...	1616
Ludlam John	Scarcliff	
Ludlam John	Alfreton ...	1684
Ludlam John	Blackwell	
Lupton James	Ripley	
Machon George	Barlborough ...	1667
Machon William	Barlborough	
Madeley Thomas	Doveridge	1640
Manners Lady	Great Rowsley	
Marples John	Morley	
Marriott Fanny	Hayfield	
Marshall Thomas ...	Chapel-en-le-Frith	1704
Massie Jane	Denby	1728
Mather Samuel	Brassington	
Mather Samuel	Aston on Trent ...	1706
Melbourn Lord Viscount	Melbourn	
Mellor Robert	Tideswell	1736
Mellor ——	Great Barlow ...	1752
Meymott John	Brampton ...	1727
Meynell Lydia	Church Broughton	
Middleton James	Tideswell	
Middleton Joseph ...	Stanton by Dale...	1698
Middleton Thomas ...	Eyam	
Milnes Robert	Staveley	1731
Milnes William, esq. ...	Ashover	liv.
Milnes John, esq.	Ashover	liv.

Names.	*Places.*	*A.D.*
Milward Thomas	North Winfield ...	1790
Milward James	North Winfield	
Mirfin Henry	Killamarsh ...	1744
Monk Thomas	Measham	1713
Moore Isabella	Derby	1673
Moore Robert	Winster	1718
Moore Anthony	Winster	1651
Moore Anthony, jun. ...	Winster	1721
Morewood Andrew, esq.	Dronfield, &c. ...	1686
Morewood Rowland, esq.	Alfreton	1747
Morley George	Hognaston	1720
Morton Adam	Hathersage ...	1720
Morton Godfrey	Beighton	
Morton Joan	Hathersage, Darwent and Outseats	1611
Moseley Ralph	Doveridge	1714
Mosley Francis	Chapel-en-le-Frith	1703
Mottershaw John	North Winfield	
Mower Robert	Holmsfield ...	1719
Mower Prudence	Holmsfield ...	1725
Mower George, esq. ...	Holmsfield	
Mower Robert	Great Barlow ...	1775
Mundy Adrian, esq. ...	Radbourn, Mackworth, Allestree and Quarndon...	1677
Mundy ——	Kirk Langley	
Murray Lieut.-General...	Staveley	1820
Nadin Abraham ...	Hartington ...	1807
Naylor Christopher ...	Derby	1666
Needham Ralph ...	Buxton	
Needham Samuel ...	Castleton	
Needham Samuel ...	Chapel-en-le-Frith	
Nevill Christopher ...	Walton on Trent	1700
Newbold John, of Hackenthorpe	Beighton	
Newbold John, of Sothalls	Beighton	
Newbold Nathaniel ...	Brampton ...	1729
Newbold John	Beighton	1699
Newton Vincent ...	Wheston	1816
Newton Robert, esq. ...	Mickleover ...	1784
Newton Samuel	South Winfield ...	1683
Newton William ...	Egginton	1820
Nicholson Mary ...	Glossop	1759
Nodder John	Ashover	
Noon ——	Sudbury	
Norborn John	Barlborough ...	1760
Norman Henry ...	Beeley	
North Florence	Edlaston and Wyaston	
Oates Robert	Winster	1719
Okeover Rowland, esq.	Atlow and Mappleton	1727
Okeover Mercy ...	Atlow	1740
Oldham John, esq. ...	Shirland	1787
Osborne Jacob	Elvaston	1712
Osborne Edward ...	Derby	
Osborne Rev. William...	Derby	
Owfield Roger	Ashbourn	1630
Owfield Thomasine ...	Ashbourn	1630
Palfreeman Elizabeth ...	Wormhill ...	1782
Palfreeman Thomasine	Monyash ...	1824
Parker Adam	Alfreton	1800
Parr John	Barlborough ...	1764
Pegge Edward, esq. ...	Osmaston, Yeaveley, Shirley and Ashbourn ...	1666
Pegge Elizabeth ...	Shirley and Yeaveley	
Pegge Christopher, esq.	Ashbourn ...	1669
Percival Joseph ...	Aston on Trent ...	1715
Phillips John	Hault Hucknall	
Phinney Anne ...	Darley in the Dale	1703
Piggin William ...	Elvaston ...	1621
Pilkington Thomas ...	Whitwell ...	1756
Pole Sarah	Killamarsh ...	1747
Pole Margaret	Killamarsh and Barlborough ...	1753
Pole Mary	Killamarsh and Barlborough ...	1753
Pole German	Dalbury, Mackworth, Muggington and Tansley	1682

Names.	*Places.*	*A.D.*
Pole Rev. Samuel ...	Mugginton ...	1746
Pole Mrs. Anne ...	Mugginton and Radbourn	1746
Pole Mrs. Frances ...	Mugginton ...	1751
Pole E. S. Chandos, esq.	Radbourn ...	liv.
Pole Milicent	Radbourn ..	1682
Pole German, esq. ...	Ashbourn ...	1682
Pole Margaret and Mary	Barlborough ...	1752
Pole Elizabeth ...	Brailsford ...	1698
Port Catherine	Mappleton, Markeaton, Mercaston, Mickleover, and Radbourn	1682
Port Sir John	Etwall and Repton	1556
Port Catherine	Ashbourn, Fenny Bentley, Tissington and Thorpe	1722
Port John, esq. ...	Thorpe	1715
Potterell Edward, of Derby	Duffield	1667
Potterell William, of Okeham	Duffield	1735
Potter Ann	Ockbrook ...	1709
Potter William	Derby	
Potter William	Morley	
Pownall John	Marston on Dove	1671
Powtrell Anne	West Hallam	
Purslove Robert ...	Tideswell ...	1560
Radcliff John ...	Peak Forest, Chapel-en-le-Frith, Hayfield and Mellor	1784
Radcliff Thomas ...	Mellor	1803
Ramsor John	Lullington	1676
Raworth John	Dore	1804
Reans Edward	Wessington	
Revell Edward, esq. ...	Shirland	
Revell John	Dronfield ...	1659
Reynolds Margaret ...	Alfreton	1621
Rhodes Elizabeth ...	Stapenhill	
Richardson Elizabeth ...	Dronfield ...	1684
Richardson John and Samuel	Smalley school ...	1712
Richardson Samuel ..	Smalley, Horsley, &c.	1711
Rider Ralph	Longstone and Monyash	1709
Roberts James	Yolgrave	1681
Robinson Richard ...	Woodthorpe ...	1777
Robinson Daniel ...	Stapenhill	
Robinson George ...	Tideswell	
Robinson William ...	Alvaston	
Rodes Francis, the Judge	Staveley	1584
Rodes Francis, esq. ...	Staveley	1578
Rodgers Joseph	Staveley	1769
Rodgers Paul	Staveley	1784
Rodgers Joseph	Staveley	1755
Roe Thomas	Parwich	1794
Ronzier Margaret ...	Sutton	
Rossington Anne ...	Tideswell	1737
Rouze Richard	Elton	1703
Rutland Duke of ...	Great Rowsley	
Sacheverel Jacinth, esq.	Morley and Smalley	1656
Sale Rev. William ...	Derby	1588
Sale Elizabeth	Barrow on Trent	
Salisbury Mrs.	Measham	
Saxton John	Etwall	
Scargell Rev. John ...	West Hallam ...	1662
Scarsdale Lord	Winster ...	liv.
Scholes Elizabeth ...	Castleton ...	1754
Scholler Robert	Great Rowsley ...	1700
Schollar Robert ...	Pilhough	
Scott Elizabeth	Doveridge ...	1696
Shalcross Richard ...		
Shawe Edward	Ashbourn ...	1625
Shaw William, sen. ...	Barlborough ...	1712
Shaw James	Brampton ...	1630
Shaw Thomas	Horsley ...	1735
Shepherd Isaac	Dore	1811
Shepperd Richard ...	Aston on Trent	
Shipstone John	Staveley ...	1722
Short Rev. Lawrence ...	Ashover ...	liv.

Names.	Places.	A. D.
Shrewsbury Countess of	Derby	1599
Silvester Richard ...	Hathersage ...	1760
Sims James	Morley	
Sitwell George, esq. ...	Eckington ...	1715
Sitwell Robert, esq. ...	Staveley ...	1599
Slack Arthur	Buxton	
Slater John	Belper	
Slater Rev. John ...	Kirk Ireton ...	1686
Slater John	Hognaston ...	1683
Slater George	Barlborough ...	1640
Slater John	Winster ...	1694
Slater Christopher ...	Barlborough ...	1649
Sleigh Samuel	Ashover	1684
Sleigh Margaret ...	Hartington	
Sleigh Lady	Morley	
Smith Matthew ...	Belper	1713
Smith Henry	Belper	1705
Smith Gervase	Wormhill ...	1760
Smith Henry	Staveley ...	1787
Smith Mrs.	Staveley ...	1718
Smithson Isabella ...	Bolsover ...	1759
Spalden Nicholas ...	Ashbourn ...	1710
Spateman John	Derby	1729
Spateman George ...	Matlock	1647
Spencer Mary	Atlow	1742
Spilsbury Benjamin, esq.	Aston on Trent ...	1815
Sprentall Nicholas ...	Whittington ...	1656
Spurrier Walthall ...	Marston on Dove	
Stafford Robert and others	Baslow	
Stafford Rachael ...	Mellor	
Staley Francis	Yolgrave ...	1728
Stanley Henry	Kirk Langley ...	1724
Standford John	Wingerworth ...	1727
Stanhope George ...	Hartshorn	
Stanhope Rev. George Dean of Canterbury ...	Spondon ...	1727
Staples James	Derby	
Staveley Alice	Castleton ...	1781
Staveley Mary	Castleton ...	1785
Steeple John	Hopton	
Stephenson John ...	North Winfield ...	1675
Stevenson Edmund ...	Dronfield	1577
Stevenson Richard ...	Dronfield	1593
Stevenson Thomas ...	Great Barlow ...	1743
Stevenson Susannah ...	Great Barlow ...	1752
Stevenson Ann	Brampton ...	1743
Stockes William	Shirland, Stretton, &c.	1696
Stone Ann	Bolsover	
Stone Elizabeth ...	Derby	1717
Storer Anthony	Ashover	1715
Storer John	Kirk Ireton ...	1590
Storer George	Heage	1705
Stowman Edward ...	Derby	
Strelley Philip, esq. ...	South Winfield	
Strutt Matthew	Bakewell ...	1798
Strutt Thomas	Blackwell ...	1790
Stubbing Richard ...	Winster	
Suite Dorothy	Castleton ...	1670
Summers George	Wirksworth ...	1685
Sutton Robert	Brampton	
Swan Ann	Bakewell ...	1676
Swetnam Rev. J. ...	Derby	1652
Swift James	Dronfield	1610
Tantum Jonathan ...	Codnor and Loscoe	1732
Taylor John	Wirksworth ...	1744
Taylor Gervase	Barlborough ...	1763
Taylor Paul	Ashbourn	1640
Taylor Elizabeth ...	Ashbourn	1650
Taylor George, esq. ...	Ashbourn and Tapton	1668
Taylor Dorothy ...	Swadlingcote ...	1760
Taylor Thomas ...	Hartington ...	1776
Taylor John	Belper	1746
Taylor Anthony ...	Darley in Dale	
Taylor Thomas	Dronfield ...	1681
Thompson George ...	West Hallam ...	1704
Thornhill Thomas ...	Bamford	
Tomkin Francis ...	Bolsover and Walley	
Tomlinson Elizabeth ...	Newbold ...	1779
Tomlinson Richard ...	Walton on Trent	1700
Tomlinson Robert ...	Walton on Trent	1700

Names.	Places.	A. D.
Tomlinson Samuel ...	Brampton ...	1729
Tomlinson Elizabeth ...	Brampton	
Toplis ——	Brassington	
Towle Joseph	Sawley	1721
Towndrow Edward ...	North Winfield ...	1790
Trickett Mary ...	Bowden, Middleton and Hayfield	1712
Turie Rev. Robert ...	Dore, Killamarsh, Bamford, Stony Middleton and Darwent ...	1720
Turbutt Eleanora ...	Morton and Shirland	1826
Turton ——	Sudbury	
Turner Mrs. Elizabeth	Swanwick school	1740
Turner George, esq. ...	Swanwick school	1740
Turner George ...	Alfreton	1641
Turner Elizabeth ...	Bonsall	1737
Vaughan John ...	Barlborough ...	1714
Vaughan Kithe ...	Langwith and Scarcliff	1813
Vernon Mary	Sudbury	1631
Vernon John	Peak Forest ...	1750
Vernon John	Peak Forest ...	1720
Vernon John	Chapel-en-le-Frith	1730
Wade Thomas	Mickleover ...	1678
Wade Thomas ...	Staveley	1715
Wagstaffe Edmund ...	Calow	1668
Wagstaff Martha ...	Glossop	1689
Wagstaff Thomas ...	Coton in the Elms	1773
Walker John	Bradley ...	1691
Walker Anthony ...	Breadsall ...	1714
Walker Robert ...	Chaddesden ...	1705
Walker William	Matlock	1631
Walker William ...	Chapel-en-le-Frith	1625
Walker John	Turnditch	
Walklake Thomas ...	Hayfield	1659
Wall Thomas	Scropton	1807
Wall Humphry	Doveridge	
Walthall William ...	Derby	1608
Walton Rev. John ...	Derby	1603
Walton Jane	Derby	
Ward Samuel	Derby	1707
Ward John	Killamarsh ...	1669
Ward Jeremiah ...	Peak Forest	
Waterhouse Mr.	Edlaston and Wyaston	
Webster Peter	Whittington ...	1674
Webster Peter	Whittington ...	1750
Webster Joshua	Whittington ...	1696
Webster William	North Winfield ...	1790
Webster Joseph, of Stanton	Duffield	1685
White George	Baslow	
White Margaret	Baslow	
White Sir Thomas ...	Derby	1566
White Michael	Taddington ...	1798
Whitehead Thomas ...	Hault Hucknall ...	1724
Whitehead Thomas ...	Repton	1654
Whittingham James ...	Castleton	
Whyte Thomas ...	Stony Middleton	1692
Widdowson William ...	Sutton	1735
Wilcox Elizabeth ...	Derby and Elvaston	1646
Wilcockson George ...	Brampton ...	1713
Wilkinson William ...	Bolsover	
Wilkinson John ...	Brampton	
Wilks George	Brampton	
Wilkson Roger ...	Wormhill ...	1714
Wilkson Rev. Roger ...	Taddington and Wormhill poor and school ...	1714
Williams Thomas ...	Norbury	1687
Willoughby Sir Henry ...	Risley	
Wilmot Robert, esq. ...	Chaddesden ...	1737
Wilmot Robert, esq. ...	Chaddesden ...	1658
Wilmot Robert, esq. ...	Chaddesden ...	1671
Wilmot Robert, sen. ...	Derby	1638
Wilshaw John and Hen.	Buxton	
Wilshaw Humphry ...	Peak Forest and Chapel-en-le-Frith	
Wolley William ...	Church Broughton	1728
Wood Samuel	Chapel-en-le-Frith	1765
Wood John	Barlborough ...	1731

Names.	*Places.*	*A.D.*	*Names.*	*Places.*	*A.D.*
Woodis Sarah	Wirksworth ...	1707	Worral Richard	Beighton	
Woolley Anthony ...	Matlock	1668	Wright Thomas, esq. ...	Longstone parish	
Woolley Adam ...	Marston on Dove	1700	Wright Captain Henry...	Longstone parish	1762
Woolley William ...	Marston on Dove	1719	Wright William, esq. ...	Longstone and Great Wardlow	1656
Woolley William, of Hackney	Marston on Dove	1726	Wright Rebecca	Dronfield	1676
Wolstenholme Joseph ...	Dore		Wright Anthony ...	Wormhill ...	1768
Wolstenholme Godfrey	Whittington ...	1682	Yale Mrs.	Staveley	1721
Worden Robert ...	Doveridge	1657	Youle Richard	Bolsover	1699

(No. 17.)

Eminent Natives of the County of Derby.

KEY TO THE REFERENCES.

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G. Granger's Biographical History of England, 6 vols. 8vo, 1824.
B. A Collection of Derbyshire Biography, penes William Bateman, esq. F. A. S.
GM. Gentleman's Magazine.
F. Fuller's Worthies of England, Nichol's edition, 2 vols. 4to, 1811.
HH. Hunter's History of Hallamshire, folio, 1819,
H. Hutton's History of Derby, 8vo, 1791.
MM. Monthly Magazine.
FS. Funeral Sermon.
N. Nonconformist's Memorial, 2nd edition, 3 vols. 8vo, 1713–27.
LD. Lyson's Magna Brit. Derbyshire, 4to, 1817.
WS. Walker's Sufferings of the Clergy, folio, 1714.
P. Bagshaw's Spiritualibus Pecci, 8vo, 1702.
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DD. Davies' History of Derbyshire, 8vo, 1811.
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HL. Hieron's Life of Porter, 4to, 1691.
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Abney Sir Thomas, lord mayor of London, Willesley, born 1639, died 1722. His Life.
Agard Arthur, antiquary, Foston, born 1540, died August 22, 1615. B. D.
Allen John, poet and schoolmaster, Lea in Ashover, born 179..., living.
Allen Hannah (or Hatt) Snelston, born 1638. Her Life, 12mo, 1683.
Allestry Rev. Charles, divine and author, Derby, born 1604. A. O. 4. 656.
Allestry William, Recorder of Derby, Derby, born 1598, died 1655. G.
Alleyne Sir John, lord mayor of London, Gresley, died 1635. Monument at Gresley.
Alsop Richard, engraver, of Manchester, Hartington, born 1779, living.
Appleby Sir Edward, knt. Appleby, 20 Edward III. Burton's Leicestershire.
Appleby George, Appleby, died 1461, Burton's Leicestershire.
Arnold Joshua, pious Quaker, Whittington, born 1648, died 1712. B.
Ash Rev. John, presbyterian divine and author, Malcalf, born 1671, died 1735. His Life.
Ashbridge Rev. John, Heath, born 1788, died 1820. G. M. 90. 635.
Ashburne Thomas, Ashbourn, flou. 1382, F. Plott's Staffordshire, 275.
Ashe Francis, of London, goldsmith, benefactor, Derby, born 1664. Simpson's Derby, 808.
Ashton Dr. Charles, divine and critic, Bradway in Norton, bapt. March 25, 1663, died 1752. B. D. H. H.
Babbington Anthony, esq. conspirator, Dethicke, born 15..., died 1586. Pilkington, 2. 325, D. D. 521.
Babington Sir William, C. T. K. B. Dethicke.
Bage Robert, novelist, Darley near Derby, born February 29, 1728, died 1801. Dr. Isilis cur. of Literature, v. 3. 93, 108. H. M. M. December, 1801.
Bagshaw Rev. William, Apostle of the Peak, Litton, born 1628, died 1702. His Life.
Balmanno Mary (late Hudson, of Bakewell) wife of Robert Balmanno, secretary to the Artist's Fund, poetess, Matlock, born November 10, 1802.
Bancroft Thomas, "The little Poet," Swarkstone, died 16... L. D.
Barker Rev. Robert, M. A. writer, Darley, born June 23, 1741, died April 29, 1822.
Barker Rev. Robert, B. D. antiquarian, Bakewell, born 1736, died 1796.
Barker Rev. Anthony Auriol, controversialist, Baslow, living.
Barnsley John, centenarian, in the Peak, born 1686, died 1787. G. M. 1787.
Barret Joseph, pious merchant of Nottingham, Sandiacre, born August 2, 1665, died August 28, 1698. His Life, 1699 and 1700, 8vo.
Bassano Francis, herald painter and antiquarian, Derby, born 1675, died 1746.
Bateman Robert, esq. endower, Hartington, born 1561, died 1644. Ferrar's Life, &c.

Bateman Henry, poet, Derby, 17..., living.
Bateman Sir Hugh, political writer, Derby, born 1756, died 1824. G. M.
Bathew Thomas, compiler of the list of sheriffs, &c. Sudbury, died September 23, 1824.
Bayley Rev. John, tutor at Wymondley academy, born 1752, died Jan. 12, 1818. Evangelical Magazine, 26, 159, 110, &c.
Bec Anthony, bishop of Durham, Pleasly, born 1340.
Bembrigge (or Bainbridge) William, poet, Bolsover, born 1791, living.
Bennet Rev. John, dissenting minister, Lea end, in Chinley, born 1714, died 1759. Life of Mrs. Bennet. Everet's Methodism, 257.
Bennet Rev. William, dissenting minister and polemic, Chinley, born 1752, died 1821. His Life.
Bennet Gervas, esq. gave the denomination of Quaker to the Society of Friends. Lempriere's Dictionary.
Bennet John, singer, Ashford, born October 13, 1754.
Beresford James, L. L. B. founder at Cambridge, Fenny Bentley, born 14..., died 1520. Harwood's Lichfield, 241.
Billingsley Rev. John, dissenting minister and writer, Chesterfield, bapt. February 14, 1657, died 1722. F. S.
Bingham Rev. John, nonconformist, Derby, born 1607, died 1682. N. 2. 187.
Birbeck or Burbeck Rev. Thomas, nonconformist, Staveley, circ. 1614, died 1674. N. H. H.
Blackwall John, naturalist, Blackwall, born 17..., living.
Blackwall Rev. Anthony, writer, Kirk Ireton, born 1674, died 1730. B. D.
Blore Thomas, topographer, Ashbourn, born December 26, 1764, died 1818–19. See Hallamshire.
Blore Edward, artist, Derby, born 179..., living in London.
Blore Mrs. Dorothy, (widow of P. Gell, esq.) poetess, Chesterfield, born February 4, 1758, died April 29, 1808 Seward's Beauties.
Blount William, Lord Mountjoy, statesman, Barton Blount, died 1535. Niodas Test. Vetus, 670.
Blount Sir Walter, warrior, Elvaston, born 13..., died 1403.
Blount Walter, Lord Mountjoy, Barton Blount, died December 1, 1474. Harwood's Lichfield, 147.
Blythe Jeoffry, bishop of Lichfield and Coventry, Norton, born 14..., died 1534. Godwin's Bishops of England.
Blythe John, bishop of Salisbury, Norton, born 14..., died 1500. Godwin's Bishops of England.
Blythe Rev. Samuel, dissenting minister at Birmingham, Norton Lees, born January 31, 1719, died 1796. B.
Booth Rev. Abraham, dissenting minister and writer, Blackwell, born 1734, died 1806. His Life. B. D.
Boothby Miss Hill, Dr. Johnson's correspondent, Ashbourn, born 1708, died 1756. Boswell's Johnson.
Boothby Sir Brooke, poet and political writer, Ashbourn, born 1744, died 1824.
Bosworth Rev. Joseph, M. A. F. R. S. L. and F. S. A. Etwall, born 17...
Bothe Lawrence, archbishop of York, died 1480. Godwin's Bishops of England.
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Bott Rev. Thomas, writer, Derby, born 1688, died 1754. B. D. Ashe's Life. L. D.
Bott William, topographer of Buxton, Chelmorton, born May 11, 1735, died March 24, 1804.
Bourne Rev. Samuel, presbyterian minister and writer, Derby, born 1647, died 1719. His Life.
Bradley Rev. Samuel, theologian, Hall field near Atlow parish, born 177..., living.
Brailsford Thomas, topographer for the County, North Winfield.
Brindley James, civil engineer, Thornsett, born 1716, died 1772. B. D.
Broadhurst Rev. Edward, dissenting minister, born 1691, died 1730. Life of Bourne.
Brocklehurst William, benefactor, Chelmorton, bapt. September 2, 1733, died July 25, 1792. Epitaph at Chelmorton.
Brown Henry, chemist, prize medalist, Derby, born 17..., living.
Brushfield Thomas Nadauld, poet, Ashford, born 17..., living.
Budworth Rev. William, schoolmaster, Longford, died 1744. Epitaph at Chelmorton, 685, 785—788 and 1008. G. M. 1792, p. 292.
Bullock Rev. George, of Ashford in the Water, Derby.
Bullock Rev. William, fellow of St. John's, Cambridge, ejected. W. S. 149. Ch. Memor. 265.
Butler William, physician, born 1726.
Burton Dr. Nicholas, president of St. John's College, Cambridge, died 1759. Pegge's Curalia, xiii.
Buxton Rev. Anthony, minister at Hayfield, Chelmorton, born 1633, died 165... P. 29.
Buxton Jedediah, calculator, Elmton, born 1707, died 177. B. D.
Calvert George, surgeon, Glossop hall, born 1795, died July 14, 1825. G. M. November, 1825.
Carson William, poetical woolcomber, Yolgrave, born August 5, 1744, died May 13, 1822.
Caywood Rev. ....., divine and author, Matlock, born 17..., living.
Chantrey Francis Leggitt, sculptor, Norton, born April 7, 1782, living. Rhodes Peak Scenery.
Chappel Miss, prize artist in painting, Ockbrook, living.
Charles Rev. Samuel, nonconformist, Chesterfield, born 1633, died 1693. N. 2. 182.
Cheney Lieutenant-General Robert, of the 3rd bat. 1st foot guards, warrior, Meynell Langley, born 1766, died March 9, 1820. Derby Mercury.
Cokaine Sir Aston, poet, Elvaston, born 1608, died February, 1683. B. D. and . A. O. 4. 126.
Cokaine Sir John, chief baron of the exchequer, Ashbourn, born 13..., died 1403. Dugdale.
Cokaine Sir Thomas, writer, Ashbourn, born 15..., died 1592. B. D.
Coke George, bishop of Hereford, Trusley, died December 10, 1646. A. O. F.
Coke Sir John, secretary of state, Trusley, born 1560, died 1644. C. F.
Coke Daniel Parker, esq. Derby, born July 17, 1745, died December 6, 1825. G. M. January, 1826.
Coke Sir William, justice of Ceylon, South Normanton, born 1775, died 1818.
Congreve William, centenarian, Bolsover, born 1643, died 1754. Hunter's Hallamshire.
Cooper John, dissenter, founder, Ashbourn.
Cotes Jonathan, mineralogical editor, South Normanton, died 1826.
Cotton Rev. John, puritan and writer, Derby, born 1584, died 1652. His Life.
Creswell Rev. ....., of Edale. G. M. 1642. P. 25.
Crompton Peter, M. D. politician, Derby, born 175..., living.
Crowshawe Richard, benefactor, Markeaton, born 1561, died June 1631. H. 157. D. D. 149. S. D.
Cubley Samuel, portrait painter, Derby, born 1786, living.
Curzon Hon. Henry, admiral, Kedleston, born 1765.
Curzon Roger, cardinal legate, Croxall, temp. John. F.
Dakeyne Daniel, poet, Darley parish, born 1763, died 1806.
Denman Dr. Thomas, physician and writer, Bakewell, bapt. July 13, 1733, died November 26, 1815, M. M.
Denman Dr. Joseph, physician and writer, Bakewell, born April 7, 1731, died July 20, 1812.
Dethick Sir Gilbert, Derby, born 1500, died October 3, 1584. Archæologia, i. xvi. Hearnes cu. Disc. 2.
Dethick Sir William, herald, Derby, born 1542, died 1612. Hearnes cu. Disc. 2. 431.
Drinkwater Rev. John, poet, Ashford, born January 11, 1789, died November 7, 1824. Derby Mercury.

Denman Sir Thomas, attorney general to his majesty, William IV. Stony Middleton, living.
Evans Rev. William, dissenting minister, Roston, born November 10, 1797, died April 3, 1823. Memoirs by Hooper.
Eyre George, "The Derbyshire Hudibras," Castleton, born 17..., died 1787.
William Newton, in his communication to the Editor of the Sheffield Register, November 12, 1787, says, "This extraordinary man, well known to the mathematical world by the name of George Eyre, of Yorkshire bridge, is now blind. In the earlier part of his life, his time was entirely devoted to the study of astronomy, poetry, music and metaphysics; in all of which sciences he shone with lustre of the first magnitude. Perhaps it may be amusing to learn, that this very man was the first who taught music scientifically in the Peak of Derbyshire."—He was living with Mr. Hall, of Castleton, November 1787, aged nearly 83.
Fanshawe Henry, esq. founder of grammar school, Dronfield, born 15..., died about 1576. Pilkington's History.
Fox John, Castleton, long liver, born 1723, died October 18, 1825. Derby Mercury, Nov. 9, 1825.
Farneworth Rev. Ellis, translator, Bonsall, c. 1710, died 1763. B. D.
Fitz Herbert Alleye, Lord St. Helens, diplomatist, Tissington, born 1753, living.
Fitz Herbert Sir Anthony, law writer, Norbury, c. 1470, died 1538. B. D. A. O.
Fitz Herbert Nicholas, biographer Norbury, c. 1550, died 1612. B. D. A. O.
Fitz Herbert Sir William, political writer, Tissington, born 1748, died 1791. B. D.
Flamsteed John, astronomer royal, Denby, born 1646, died 1719. B. D.
Floure Rev. John, divine, Cubley, born 1624, died 165...
Ford Rev. Thomas, nonconformist, Willington, 16..., c. 1677. N. 2. 204.
Ford Thomas, vocalist, Derby, born January 3, 1785, living.
Fox Douglass, M. D. natural philosopher, Derby, living. Lysons, 2. 482.
Frescheville Lord John, loyalist, Staveley, born 1606, died 1682. Clarendon's Life.
Frost Isaac, schoolmaster and arithmetician, Bakewell, born 17..., died 17....
Furness John, armenian preacher and controversialist, Stony Middleton, born September 4, 1760, living.
Gales Joseph, editor of the Sheffield Iris in 1788 and printer to the American government, Eckington, born 17.... Manchester Mag. 1815, vol. 1. p. 51.
Garlick Richard, catholic priest, Dinting, born 155..., died July 24, 1588. Chaloner's Catholic Priests, p. 111.
Gell Rev. Philip, divine and author, Wirksworth, born 1781, living.
Gell Dorothy (daughter of William Milnes) poet, born February 4, 1758, died April 29, 1808.
Gell Anthony, esq. founder, Wirksworth, died July 20, 1583.
Gell Sir John, parliament officer, Wirkworth, born 1593, died 1671. L. D. Pilkington. Hutchinson's Memoirs.
Gell John, admiral of the white, Hopton, born 17..., died 1806. M. M.
Gell Thomas, lieut.-colonel for parliament, Wirksworth, born 1524, died 1656.
Gell Rev. Robert, divine and author, Wirksworth, born 178..., living.
Gell Sir William, classical traveller, Hopton, born March 25, 1777.
Gisborne Rev. Francis, benefactor, Staveley, born 1731, died 1821. G. M. 90. 579.
Gisborne John, esq. poet, Derby, born August 26, 1770, living. Seward's Life of Darwin.
Gisborne Rev. Thomas, poet and moralist, Derby, born October 31, 1758, living.
Godwin Rev. Edward, writer, Barlow, born 1732-3. H. H. 246.
Goldsmith T. B. poet, Derby, born 177..., living.
Gould John, Bakewell, born 1763, died November, 1829.
Gould George, geographer, Bakewell, born 17..., living.
Gould Nathaniel, philanthropist, Bakewell, born 1756, died March, 1820. G. M. 90. 380.
Gratton Joseph, of Chesterfield, Wingerworth, born 17..., living.
Gratton John, of Chesterfield, coal agent and surveyor, Wingerworth.
Gratton John, poetical and suffering quaker, Tideswell, born 1642, died 1712. His Life.
Greasley Francis, benefactor, Wingerworth, born 1735, died 1818. B.
Greaves Rev. A. Benjamin, theologian, Rowlee in Woodlands, born 1751, living.
Green James, poet, Ashford, born December 11, 1746, living.
Greenwood T. poet, Derby, born 17..., Reporter, Anec. No. 20.
Gregson Henry, esq. attorney at law, Turnditch.
Grey William, bishop of Ely and lord treasurer, Codnor, died 1478. F.
Hadfield Rev. Thomas, M. D. divine, Chesterfield, born October 9, 1701, died February 21, 1741. Funeral Sermon, and Pegge's Anom.
Hadfield George, Simondley, born 17..., living.
Hague Joseph, esq. benefactor, Chunal in Glossop, born 1695, died 1786. Monument at Glossop, and Rhodes' Peak Scenery.
Hallam Rev. Joseph, Methodist preacher, Stony Middleton, born 1774, died 1805. B.
Hallam John, of Derby, eccentric character, Brailsford, born 17..., died August 19, 1828.
Hallifax Samuel, bishop of St. Asaph, Chesterfield, born 1733, died 1790. B. D.
Hardwick Elizabeth, countess of Shrewsbury, Hardwick, born 1520, died 1607. F. H. H.
Hardy William, mineralogist, Brassington, c. 1765.
Harrison Anne, long liver, Great Longstone, born 1703, died 1826. Derby Mercury, April 5, 1826.
Harrison Samuel, eminent singer, Belper, born 1760, died 1812. Epitaph in Bakewell
Harrison Rev. Simon, of Jesus' College, Oxford, ejected. W. S. 147. Church Mem. 257.
Harrison Rev. Ralph, socinian writer, Chinley, born 1748, died November 24, 1810. B. His Life.
Hastie James Swift, poet of Sheffield, now (1829) dissenting minister at Otley, county of York, Lodes in Brampton, born 180..., living. Evangelical Magazine, October, 1829, p. 461.
Hattersley Margaret, long liver, Hathersage, born 1549, died January 17, 1650.
Hazlehurst Joseph, civil engineer, born 17..., living.
Heathcote Gilbert, M. D. quaker and writer, Cutthorpe, born 16..., died 17....
Heathcote George, compiler of Psalms, &c. Bakewell, born 1755, died May 4, 1828.
Hieron Rev. Samuel, nonconformist, Stapenhill, born 17..., died 1687. Hieron's Life. N.
Hieron Rev. John, nonconformist, Stapenhill, born 1608, died 1682. His Life.
Holmes Miss, vocalist, Derby, died July, 1827.
Holmes George, song writer, Darley, born 17....
Hooson William, mineralogical writer, Yolgrave, born 17..., died 17....
Hope Rev. Charles Stead, divine and author, Derby, born 1762, living.
Horne Thomas, schoolmaster and writer, West Hallam, born 1609, died 1654. A. O. 3. 365.
Howe John, poet, Litton, born July 14, 1774, living.
Howitt ....., druggist, Nottingham, author of Legendary Tales and other Poems, Heanor, born 17..., living.
Howitt Richard, poet, Heanor, born 17..., living.

Hutchinson Francis, bishop of Down and Connor, Carsington, born January 2, 1659, died 1739.
Hutton William, historian, &c. Derby, born 1723, died 1814. His Life.
Ince Thomas, poet, Chesterfield, born May 2, 1768, died May 21, 1825.
Ince Thomas Norris, herald and antiquarian, Wirksworth, living.
James Edward, catholic priest, Beaston, born 156..., died 1588. Chaloner's Priests, 126.
Jessop Josias, civil engineer, Butterley, born 17..., died September 30, 1826.
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Johnson Christopher, physician, Kiddersley, born 15..., died 1597. L. D. 214, and G. M. 99. 234.
Johnson Michael, father of Dr. Samuel Johnson (Thoresby's MSS. penes J. W.) Cubley born 1656, died 1731. Hawkin's Johnson.
Kent Thomas Wickham, sculptor and musician, Bradwell, born 1744, died 1817. Annual Ob. 2. 459.
Keys John, of Derby, flower painter, Derby, born 1798, died April 21, 1825. Derby Mercury, April 27, 1825.
Kinder Philip, poet and antiquary, died 16.... W. F. 2. 162. Poetical, 199 and 442.
Kitchin John, esq. of Gray's Inn, Belper.
Kniveton St. Loe, antiquary, Kniveton, born 15..., died 16.... L. D. D. D. 444. Heralmin, p. 22.
Leacroft Edward Beecher, poet, Wirksworth, bapt. September 30, 1737, died June 5, 1805.
Linacre Dr. Thomas, physician, Derby, born 1460, died 1524. A. O. B. D. Restituta, 1. 159.
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Lowe Rev. Henry, late brewer and mayor of Derby, divine and poet, Derby, 17..., living.
Lowe John, F. A. S. historian, Winster, born 17..., died December 31, 1825.
Lucas Bernard, mathematician, Chesterfield, born 1744, died June 22, 1810.
Macconnell Thomas, Independent minister, Derby, born 17..., living.
Mander James, mineralogical writer, Bakewell, born 1758, died April 15, 1829.
Manlove Edward, esq. poet, born 16..., died 16....
Manlove Rev. Timothy, and M. D. Ashbourn, born 1663, died 1699. His Life.
Manners Sir Roger, literary, Whitwell, died 1632. Monument at Whitwell.
Marsh Rev. Joseph, missionary in India, Bonsall, born 18....
Mawe John, mineralogist and writer, Derby, born 1766, died October 26, 1829. G. M. v. 99, part 2, p. 641.
Mellor Rev. ....., minister at Taddington, died 16.... P. 15.
Meverell Sir Sampson, warrior in France, Tideswell, born 1388, died 1462. Monument at Tideswell, and Rhodes' Peak Scenery.
Middleton Thomas Farnshaw, bishop of Calcutta, Kedleston, born 1769, died 1822. G. M.
Milner George, poet, Derby, born 18..., living.
Milnes John, inventor of the new ore dish, by which the measure and value of ore are ascertained at the same time, and the improver of the cupola furnace, and also the improver of the application of heat, Ashover, born October 30, 1759, living. Farey's Derbyshire, 1. 390.
Milward Robert, warrior, Bradley, born 1596, died 1632.
Moore Henry, artist and author, Derby, born 1776, living.
Moorehouse W. V. poet, Repton, born 17..., died 1830.
Mower Robert, esq. writer, Woodseats, born 1747, died 1811.
Mower Arthur, M. D. novelist, Woodseats, born 17..., living.
Muggliston George, poet, Chesterfield, born 17....
Muggliston William, a poet, &c. (Castalio was his signature in newspapers, &c.) Alfreton, c. 1752, died 1788. Bateman's Alfreton, p. 29.
Muggliston George, horticulturist, Repton.
Mundy Francis Noel Clarke, poet, Markeaton, born 1738, died 1815. G. M.
Newton William, "The Peak Minstrel," near to Abney, born November 28, 1750, living. Rhodes' Peak Scenery, Seward's Letters, and G. M. March, 1785.
Newton Robert, benefactor, Norton.
Ogden Stephen, poet, woolcomber and rag gatherer, eldest son of James Ogden, miner, Wirksworth, born February 19, 1751, O. S. living.
Oldfield Rev. John, nonconformist, near Chesterfield, born 1627, died 1682. H. N.
Oldfield Rev. John, jun. Carsington, born 1651.
Oldfield Dr. Joshua, dissenter and writer, Carsington, born 1656, died 1729. W. F. S.
Oldfield Rev. Nathaniel, dissenter, born 1664, died 1696. W. F. S.
Oldfield Thomas, Hinton Burley, historian, born 1755, died 1822. M. M. 54, part 2, 178.
Osborne Thomas, writer. G. M. 60. 688; 64, 756.
Osborne George, esq. political writer, died 17....
Outram Benjamin, civil engineer, Alfreton, born 17..., died 1805. Bateman's History of Alfreton. G. M. June, 1805, p. 581.
Outram Dr. Edmund, Alfreton, born 1766, died February 7, 1821. F. S.
Parkes Francis, painter, Knott Cross in Ashover parish, born 1677, died November 29, 1715. Rhodes' Peak Scenery, 296.
Peach Rev. William, fellow of St. John's, Cambridge, Derby, born 17..., living.
Pegge Dr. Samuel, antiquary, Chesterfield, born 1704, died 1796. Curalia. B. D.
Pole Ralph, justice of the king's bench, Radbourn, died 1452.
Port Sir John, founder at Repton, Etwall, died 1557. L. D.
Prime Rev. Edward, nonconformist, Weston, born 1631, died 1708. N. 2. 787. H. H.
Purslove Robert, bishop of Hull, Tideswell, founder of a grammar school there, died 1579. A. O. Monument at Tideswell.
Rawlinson Miss, artist, Derby, born 179..., living.
Rawlinson James, artist, Derby, born 177..., living.
Repindon Philip de Cardinal, Repton, born 13..., died 14... F.
Reynolds John, topographer and antiquary, Plaistow, born 1724, died 1780.
Richardson Samuel, novelist, born 1689, died 1761. B. D. Derby Reporter, September 10, 1824.
Robinson Rev. Benjamin, dissenting minister and writer, Derby, born 1666, died 1724. W. Toulmin.
Rodes Rev. Cornelius Heathcote Reaston, Barlborough, born ....., living. Derby Mercury, July 5, 1820.
Rodes Sir Francis, Staveley, justice of the common pleas, Woodthorp, died 159....
Rowlandson John, jun. nonconformist, Bakewell, born October 27, 1616, living 16.... Bagshaw's De Spirit. 12.
Sanders Thomas, colonel for parliament, Ireton, or Caldwell, born 1610, died 1695. G.
Sandars Joseph, of Liverpool, political writer, born 17..., living.
Sanders Dr. Nicholas, polemic, Ireton, died 1580. Harwood's Lichfield, 220. Gullem's Herald, 151.

Sanders Samuel, topographer, Ireton or Caldwell, born 1641, died 1688. L. D.
Seale John Barlow, D. D. F. R. S. rector of Stisted, county of Essex, 1792, writer, Derby, born 17...
Seward Anna, poet, Eyam, born 1747, died 1809. B. D.
Shaw Rev. Samuel, nonconformist, Repton, born 1635, died 1695-6. N. 2. 426. B. D.
Shelmerdine Rev. Daniel, nonconformist, Crich, born 1636, died 1699. N. 2. 166.
Sherwin Ralph, catholic priest, Rodsley, born 15..., died 1581. Chaloner's Catholic Priests, 31.
Shirley Rev. W. A. divine, living.
Shirley Sir Ralph, warrior at Agincourt, Shirley, born 1391, living 1443.
Shirley Sir Hugh, warrior at Shrewsbury, Shirley, born 13..., died 1405.
Simpson Rev. John, Derby, born 1798, living.
Simpson Rev. Robert, F. R. S. &c. divine and antiquary, Derby, born 1796, living.
Slack John, accountant, September 20, 1764, Monyash.
Slack Samuel, base singer, Tideswell, born 17..., died August 12, 1822.
Smith John Raphael, artist, Derby, born 17..., died 1812. Daye's Tour.
Stanhope Dr. George, theologian, Hartshorn, born March 5, 1660, died March 18, 1728. B. D.
Staniforth Rev. Jonathan, nonconformist, born 16... N. H. L.
Staniforth Rev. Timothy, nonconformist, born 16... N. H. L.
Stanley, Rev. Thomas, nonconformist, Duckmanton, died 1670. N. P. H. H.
Statham John, law writer, temp. Henry VI.
Stokes Mrs. novelist, of Chesterfield (formerly ..... Roger, of Dronfield) Dronfield, born 17..., living. Seward's Letters, vol. 1, p. .
Strutt Jedediah, mechanic, South Normanton, born 1726, died 1797. D. D. 517.
Strutt William, esq. F. R. S. Derby, born 1755, died 1831.
Strutt Anthony Radford, esq. mechanic, Belper, born 17..., living.
Sturges Rev. Samuel, polemic of Derby, Sudbury, born 1657-8, died 1736. Shaw's Validity, x. and xi. Cantril's Invalid, 142.
Sutton Samuel, Alfreton, died 1752. Biog. Brit. and Encyclopædia.
Swetnam Rev. Joseph, of Derby, Derby. N.
Swetnam Rev. Thomas, of Turnditch, nonconformist, Derby. N. H. L.
Tallents Rev. Francis, nonconformist, Pilsley, born 1619, died 1708. N. B. D. His Life.
Taylor Herbert, pious youth, Darley, born 1794, died 1822. His Life.
Taylor Martha, fasting girl, Over Haddon, born 1651, died 1684. Her Life. L. D 1.
Taylor Dr. John, L. L. D. theologian, Ashbourn, born 17..., died February 29, 1788. G. M. Selections, 4. 325. Nichol's Literary Anecdotes, vol. 9, p. 58.
Taylor Charles, surgeon, mineralogist and botanist to the Sierra Leone company, 1791, Stanton, born October 31, 1762, died November 28, 1818. W. Watson.
Thornhill Bache, esq. poet, Stanton, born 1747, died 1830.
Thornhill Colonel William, warrior at Waterloo, Stanton (Peak) born 178...
Tissington Anthony, mineralogist, Matlock, born 17..., c. 1784.
Twigge Jonathan, glazier and song writer, of Wirksworth, Birchover, born 17..., died 182...
Vernon Sir George, "King of the Peak," Haddon, died 1565. Collin's Peerage.
Vernon Sir Henry, governor to prince Arthur, Haddon, died 1511. Ibid.
Vernon Sir Richard, speaker of parliament at Leicester, Haddon, died 1452. Ibid.
Vernon Sir William, the last constable of England for Life, Haddon, born 1467, died 1467. Ibid.
Vickors John, attorney, writer, Derby, born 17..., died .....
Wainwright George, long liver, Bamforth, born January 28, 1714, died 1821. Everitt's History of Methodism.
Wall David, musician, Ashover, born 17...
Ward Rev. Noah, nonconformist, Derby, born 1640, died 1699. N. 2. 835.
Ward Rev. William, missionary, Derby, born October 20, 1769, died March 7, 1823. Funeral Sermon and Memoir.
Ward Rev. Richard, topographer, Belper, born 17..., living.
Waste Joan, martyr, Derby, born 15..., died 1555. F.
Watson Samuel, sculptor, Chatsworth, Heanor, born December 15, 1663, died March 29, 1715. L. D. Rhodes' Peak Scenery.
Watson Henry, sculptor, Heanor, born 1714, died 1786.
Watson Samuel, sculptor and mechanic, Heanor, born May 28, 1715, died June 3, 1778.
Watson White, mineralogical writer and sculptor, Ashford and Bakewell, baptized May 8, 1760, living.
Whately Thomas, surgeon and medical writer, Derby, born 17..., died November 16, 1821. M. M. February, 1822, and New M. M. and S. D.
Wheateroft Titus, poetical writer, &c. Ashover.
Wheateroft William, writer, Ashover.
White Michael, mathematician, Taddington.
Whitmore Lady Lucy Elizabeth, poetess, &c. Stoke hall, born 1792, living.
Willoughby Sir Hugh, naval discoverer, Risley, died 1554. F.
Wilmot Sir Edward, physician to George the Second and Third, Chaddesden, born 1693, died 1786.
Wilmot Sir John Eardly, chief justice, Derby, born 1709, died 1792. His Life, and B. D.
Winfield William, modeller, Derby, born 179..., died March 14, 1825. Derby Mercury, March 16.
Wilson William, fellow of St. John's, Cambridge, South Normanton, born March 12, 1760, died March 22, 1799.
Wilson Stephen, esq. Stenson, born October 31, 1756, died 18... His Memoirs.
Wilson Thomas, dissenter, founder, Stenson, born 1730, died March 31, 1794.
Wolley Adam, topographer, Matlock, born 1751, died 1827.
Wolley William, topographer, born 16..., died 17...
Wood Rev. John, nonconformist, Chesterfield, born 16..., died 1690. N. 2. 90, and 1. 267.
Woodward G. M. artist, Stanton by Dale, born 17..., died 1809. M. M. 38. 534.
Woodward Dr. John, naturalist, Wirksworth, born 1665, died 1723. B. D.
Wright Joseph, painter, Derby, born 1734, died 1797. B. D. M. M. 1797.
Wright John, mineral agent, and poet, Bole Hill, Wirksworth, born 17..., died 1828.

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